JOURNAL OF THE SCIENTIFIC AND MEDICAL NETWORK ESTABLISHED 1973

Paradigm Explorer

INSIDE

The Scientific & Medical Network

ISSN 1362-1211 | No 128 | 2018/3

2019 NETWORK CALENDAR

January 19-20	The Heart of the Rose – Sacred Mathematics and the Liberal Arts
February 7, 7-9 pm	Book launch with Dr Rupert Sheldrake, *Ways to Go Beyond*, King's College, Strand, Lecture Theatre B5, London WC2R 2NS
April 6-7	Mystics and Scientists 42 – *Technology, Spirituality and Wellbeing*, University of Greenwich
July 6-7	Annual Meeting, Horsley Park – *The Future of Consciousness Studies*
November 2-3	Beyond the Brain 2019, details tbc

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

We meet at 38 Denning Rd NW3 1SU at 7 for a 7:30pm start. Nearest tube station is Hampstead (Northern Line) or Hampstead Heath (Overground). Cost is £10 for members and £12 for guests. Please confirm attendance so I can anticipate numbers. Friends and non-members 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 SMN site at www.scimednet.org.

Please note that sometimes talks have to be rescheduled and information is sent via email so even if you are not in London but would like to be kept informed of changes, please send me an email and I will put your address on the circulation list.

UPCOMING EVENTS

Dr. Shantena Sabbadini – The I Ching, synchronicity and time on 21st January 2019 7:30 pm

Dr. Mike King – Mountain Calls on 18th February 2019 7:30 pm

Dr. Paul Marshall – The Shape of the Soul on 4th March 2019 7:30 pm

Jeremy Naydler PhD – The Computer and the Psyche on 8th April 2019 7:30 pm

Rupert Spira – The Nature of Consciousness on 13th May 2019 7:30 pm

CONTENTS

Notice to Contributors

All proposed contributions should be sent to the Editor by email as a Word and/or PDF file.

For further guidelines please email: dl@scimednet.org

PARADIGM EXPLORER is published three times a year by the Scientific & Medical Network, generally in April, August and December.

Editor: David Lorimer
2 Chemin de la Chaussee,
11230 St Colombe sur l'Hers,
France

E-mail: dl@scimednet.org

Web Site: www.scimednet.org

(Members may apply to the SMN Office for password to access the Members Only area of the web site).

Editorial Board:
John Clarke, Paul Kieniewicz

Printed by:
Kingfisher Print & Design Ltd, Devon

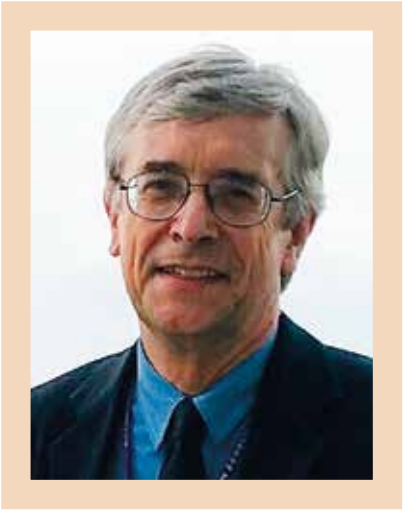
Paradigm Explorer
Registered office:
151 Talgarth Road,
London W14 9DA

Tel: 0203 468 2034.

Email: info@scimednet.org

Company limited by guarantee,
registered No. 4544694 England
Registered charity No. 1101171 UK

Cover: Northern Lights



What a Fantastic Year!

From Dr Paul Filmore, Chairman chairman@scimednet.org

Forum: Editorial (Please comment via the members' website)

I cannot remember being so moved to write 'what a fantastic year' before, but I find myself very clear on this point. It is not just our events (more later) but our outreach growing stronger through the quality of all our activities. Here I also include recent grants from our trustees to fund a number of educational projects for 'young people' and from the Salvia Foundation for our Galileo Commission project. With this outreach growing, we are attracting new members and additional funding to further our work. New members are always welcome as they bring new ideas, new energy and thus new opportunities. They also introduce further new members with their new ideas etc. A powerful synergy!

You may have read in our eNews that over 250 delegates attended the thirteenth *Beyond the Brain: Further Reaches of Consciousness Research* conference in November. What an achievement to bring to the fore new research on whether and how consciousness and mind extend beyond the physical brain and body. This year's event covered the power of intention, transpersonal psychology, consciousness in relation to the brain and the universe, lucid dreaming and out-of-body experiences. We have in particular Olly Robinson, David Lorimer, Chiara Reghellin, Michele Robinson, Tuvi Orbach and Dave King to thank. To get a feel of the atmosphere, search for 'Beyond the Brain 2018' on YouTube, and click on the 7 mins video. I should also mention that we hosted this year's event in partnership with two other organisations active in the field; The Alef Trust, with whom we collaborate on the MSc in Transpersonal Psychology & Consciousness Studies, and The Monroe Institute, who develop consciousness technologies and run consciousness-development retreats.

A smaller but very worthwhile event was our packed Continental meeting '*Catalysing a Paradigm Shift*' in Bagni di Lucca, with the Laszlo Institute of New Paradigm Research. Over 40 people attended from as far away as the US. As with the Beyond the Brain conference, working with other organisations to put on an event has become a powerful approach. Not only do we learn from the other organisations, but the cross-fertilisation leads to much learning and deeper insights all round.

I also have to mention the Prince of Wales 70th birthday event: '*The Quest for Harmony: A unifying principle in spirituality, science, sustainability and healthcare*'. For me the exciting issue was that over 200 people, many new to the SMN, came to hear such apparently divergent professionals talking on different aspects of spirituality, under the guise of harmony. I believe this could be a recipe for future engagement with the general public.

Perhaps the most exciting event has been the launch of Prof Dr Harald Walach's *Galileo Commission Report*. The full report is 125 pages, with 450 references! You will see that this edition is much devoted to the report. A summary booklet has been produced (www.galileocommission.org) and distributed at the *Beyond the Brain* conference. Perhaps our biggest challenge is to now to convey the implications of the report to different sections of the public; specifically to scientific journalists, scientists and science students. If you have thoughts on this, then please do contact us.

With all this activity and growth, we are much in need of further help to maximise our potential. We are particularly in need of help with our video editing and web archiving, finance, developing more academic contacts, office & storage space, and supporting our student initiatives. If you can help, then please let us know.

David Lorimer writes: the articles in this issue, with the exception of the one on after death communication, all relate to the work of the Galileo Commission. This project relates to what I see as one of the basic purposes of the Network, namely to expand science and medicine beyond the constrictions of a materialistic worldview. In a document about aims and ways forward, 1972 to 1982, written by George Blaker, he writes about:

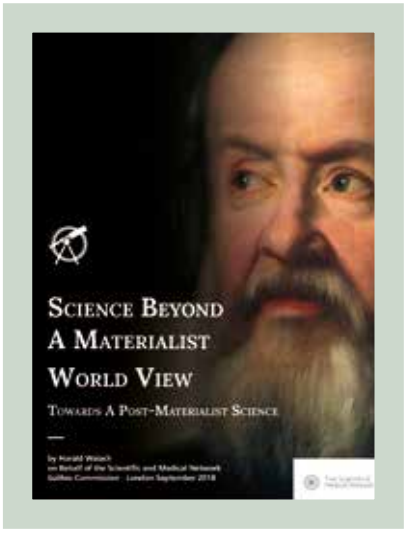
'*A commitment to advancing human perceptive abilities and understanding, encouraging science and medicine to adopt more sensitive and comprehensive approaches to human problems, embracing intuitive and spiritual insights.*'

'*A search for a more spiritual mode of thinking and being that is compatible with science… Freedom to seek alternative and wider views, particularly from mind/brain relations, new biological disciplines and advances in fundamental physics.*'

'*The aim is to win wide acceptance of man's spiritual essence, as consistent with science, hastening a widening of horizons by research, encouraging recognition that the world's ills can be cured only by an improved attitude of mind.*'

These formulations still resonate today, and in the next phase of the Galileo Commission we will work out how best to promote what one might call a consciousness or metaphysical revolution embodied in a spiritually informed and post-materialist science, using a rational and evidence-based approach while also drawing on intuitive insight, which, along with rational analysis, was highlighted in the one sheet description of the Network which I received in the summer of 1983. I encourage you to read the Report for yourselves. It will be available in print and online by the end of the year.

I join Paul in wishing you all the best of the festive season.



Galileo Commission

In a letter to Kepler, Galileo wrote: "Here at Padua is the principal professor of philosophy, whom I have repeatedly and urgently requested to look at the moon and the planets through my glass, which he pertinaciously refuses to do." Galileo continues that this professor laboured before the Grand Duke with logical arguments based on the authority of Aristotle. He adds that Aristotle himself as an empiricist would surely have changed his mind on the basis of new evidence and observations.

This refusal to look through the telescope has striking parallels today. In the 17th century, the infallibility of Scripture and Aristotle were at stake, while today it is the infallibility of scientific materialism. For example, many scientists are unwilling to look at the evidence for consciousness beyond the brain because they have an unshakeable belief that consciousness is generated *in and by* the brain.

Building on previous work beginning with Edwin Burtt's 1925 book *Metaphysical Foundations of Modern Science* and Robin Collingwood's *Essay on Metaphysics* (1940) as well as subsequent work by Willis Harman and the Institute of Noetic Sciences in the 1990s and the more recent by Marie Beauregard on a Manifesto for a Post-Materialist Science (www.opensciences.org) we established the Galileo Commission, represented by a distinguished panel of advisers affiliated to 30 universities worldwide. As you will see below, we commissioned Prof Dr Harald Walach to write a report.

The purpose of the Galileo Commission Report is to open public discourse and to find ways to expand the presuppositions of science, so that it is no longer constrained by an outdated view of the nature of reality and consciousness, and so that it can accommodate and explore significant human experiences and questions that science, in its present form, is unable to accommodate for philosophical reasons. We anticipate that expanding science will involve some new basic assumptions (an expanded ontology), additional ways of knowing and new rules of evidence (an expanded epistemology), as well as new methodologies flowing from these.

The Summary Report is available online at www.galileocommission.org **and can be ordered in hard copy from the office for £6.50 including UK postage. The full report will be available during December.**

Summary of Argument

1. No human intellectual activity, including science, can escape the fact that it has to make assumptions that cannot be proven using its own methodology ('absolute presuppositions').
2. The prevalent underlying assumptions, or world model, of the majority of modern scientists are narrowly naturalist in metaphysics, materialist in ontology and reductionist-empiricist in methodology.
3. This results in the belief that consciousness is nothing but a consequence of complex arrangement of matter, or an emergent phenomenon of brain activity.
4. This belief is neither proven, nor warranted.
5. In fact, there are well documented empirical phenomena that contradict this belief. Among them are
   a. Veridical reports of near death experiences (NDEs) with complex intuitions, perceptions, cognitions and emotions during well documented absence of brain activity.
   b. Veridical reports of non-local perception that were confirmed independently during such near-death-states of absent brain activity.

c. The large data-base of parapsychology and anomalous cognition research shows in a series of meta-analyses that such non-local perceptions are indeed possible.

d. The large data-base of children who remember previous lives, some of whom have corresponding deformities.

6. An increasing number of open-minded scientists are already researching these frontier areas using existing scientific methods, and are reaching empirically grounded conclusions that challenge the mainstream majority view.

7. They therefore argue that we need a model of consciousness that is non-reductive and allows consciousness its own ontological status.

8. A minimum-consensus model is a dual aspect or complementarity model, in which matter and mind, consciousness and its physical substrate, are two aspects of reality that are irreducible and simultaneously occurring perspectives of an underlying reality to which we otherwise have no direct access.

9. If that is granted, we can immediately see that consciousness can have its own direct access to reality, not only through sense perception, as in classical empiricism, but also through inner perception or radical introspection.

10. As a result, there may be a different and valid access route to reality, through consciousness, in addition to the classical one science is offering.

11. This might include direct access, under certain conditions, to deeper structures of reality, which may provide important insights into ethics, meaning, and values.

12. Indeed, insights from NDEs and other transformative experiences suggest that we are all embedded within a larger field of consciousness, with profound implications for ethics in an interconnected world.

13. Integrating an enlarged view of consciousness into science will also yield a new methodology that will have to be developed: the methodology of radical introspection or inner experience.

14. In view of the widespread perception that a narrow materialist world view is often uncritically passed on to young scientists by mainstream authorities as an adequate explanation of reality and as a pre-conditon for a successful scientific career, we call for an open exploration of this topic and we encourage the scientific community to become more critically self-reflective of the absolute presuppositions on which their activities are based and to consider expanding their scope.

Iain McGilchrist on Wikipedia

Thanks for sending me Rupert's piece on Wikiskeptics (https://www. www.sheldrake.org) . You may be interested, as may Rupert, in a recent experience of mine. I could not find this exchange on Wikiquote for Max Planck:

'Do you think that consciousness can be explained in terms of matter and its laws?" "No. I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness."'

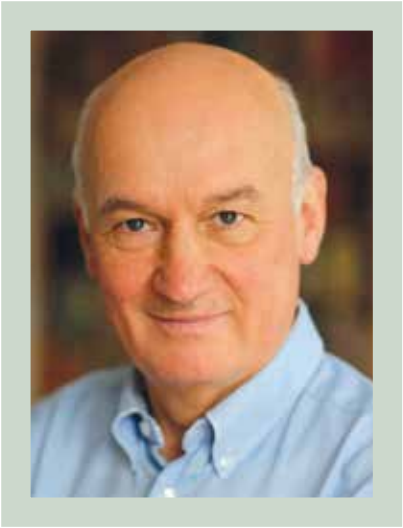
I found a page called https://en.wikiquote.org/wiki/Talk:Max_Planck, which explained:

'I have removed the following citation "I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness." Rationale: I checked this citation in its source – that is, on page 17. in the January 25, 1931 issue of the newspaper The Observer in the article entitled „Interviews with Great Scientists – VI. – Max Planck", in the digital archive of The Guardian and Observer, and this citation has proved to be false. So, in accordance with my letters on this subject (my letter's subject: a request regarding a Max Planck's quote) sent to info-en@wikiquote.org (18.11.2017.), *info-en-q@wikimedia.org(18.11.2017.), donate@wikimedia.org* (18.11.2017.), *info@wikiquote.org* (21.11.2017.), *and having regard to the answer from donate@wikimedia org* (20.11.2017), I *decided to carry out the removal of this false citation and also its replacement with other ones. The file I attached to my letters contains a detailed reasoning.'*

So I looked it up myself and found it was *verbatim correct*, and present exactly where the editor had claimed it was not. I said so, and reinstated the quote in Plank's Wikiquote page. I await developments …

December 10, 2018

Just checked, and the quote is still up on Planck's Wikiquote page, and no-one has responded to my statement about why it should be restored on Talk: wikiquote. So I guess they have had to back down. They probably didn't think anyone would go to the lengths involved in checking, and that it would soon be written out of the literature as 'proved false' … just shows its worth checking some of the other inconvenient quotes that have been said to be false – I have already discovered that some attributed to Einstein, that are said to be 'baseless', are in fact copper-bottomed.



Report of the Galileo Commission Project

Harald Walach

The remit of the Galileo Commission Project of the Scientific and Medical Network is to open up public debate for an approach within science that transcends current limitations and makes science more capable of dealing with the important questions of our time. It is an approach that is supposed to foster a healthier, socially and ecologically more relevant science that takes human experiences seriously and that is less influenced by an implicit materialist-reductionist approach. It is very important to stress that this enterprise is neither pessimistic nor negative about science, but optimistic and positive.

The idea is to help create a wider, more encompassing and relevant science. In order to do this, it is first necessary to criticise what we perceive to be obstacles and to point out where we think science is actually hemming itself in and doing itself a disfavour by either the way it is done or the underlying presuppositions it is using.

As a first starting point, I created an Executive Summary of the generic argument to be pursued. This is available as a document from the Galileo Project Website. As a second step this argument was circulated and feedback sought and incorporated as much as feasible. As a third step I fleshed out the argument, using more text, examples, empirical data and the respective references. This is the long version of the report which will be made available soon, as soon as the final editing round is finished that will incorporate as much feedback as possible. As a further move we envisage to start a public discourse, using the material at hand, publishing the long version as an academic book, producing articles and a resource website that is already available and in the making. We hope that university summer courses, finally curricula and specialised methods courses will be made available, and we hope to help launch this process and support it as much as possible.

This article gives a brief overview over the generic argument and further processes.

The Argument

What is Wrong?

The argument sets out with a brief analysis of what is currently amiss. Science has been very successful. We have made huge progress in many fields, especially regarding the insights of our natural sciences and the engineering approaches derived from it, starting with modern mobility and amenities of daily living and ending with medical achievements. There is no doubt whatsoever that the history of science so far is a history of success. But this should not blind us to the fact that this progress has come at a price and has produced problems as well. Some would say that these problems are minor and marginal and can be solved with more scientific effort (Pinker, 2018). We think that the problems are partially endemic and follow from the working mode of science and its presuppositions. Among the problems that have been identified by others as well are, to name but a few:

- The global ecological crisis, with climate change and the loss of biological diversity and arable land as its prime indicators
- The social crisis with the absurd fact that, although we have enough knowledge and wealth on this planet, we have not succeeded in abolishing poverty; on the contrary, greed, wars around power and resources and criminal activities to gain riches illicitly are still rampant

- A threatening economic crisis which has already raised its head in 2007/8 and is lurking around every corner since; this is threatening the welfare of the richer nations and will not spare the poorer ones, once it is going viral
- The crisis of health, visible in the fact that mortality figures are on the rise for the first time since more than 50 years in the US and the fact that the incidence of some important marker diseases such as diabetes, coronary artery disease, cancer are increasing; currently we can contain them with ever more invasive and also more expensive treatments but it is only a question of time when the densely populated countries in Asia will follow suit and it is a question whether our medical model will be sustainable
- The crisis of science itself: various scientific disciplines are in severe crisis. The physical sciences are at a loss when it comes to explaining where about 95% of all the energy and matter in the universe are, which has instigated severe doubt about the reliability of current theorising (Hands, 2015). In the medical sciences it is pretty clear that our knowledge is at best cursory and shaky, because of some very questionable research practices (Horton, 2015; Ioannidis, 2005). In psychology a replication crisis has shown that at least half of all purportedly scientifically sound knowledge is not replicable (Open Science Collaboration, 2015).

While some of the problems can be fixed by a better implementation of already extant knowledge and methods, some of the problems, I hold, are germane to the way we approach science. And this is, where the argument of the Report starts.

And Why Is It Wrong?

It is one thing to complain. It is more complicated to give a diagnosis. It is quite another matter to find a remedy. The complaint is ubiquitous and easy. The analysis of the underlying causes is more difficult. We think that one of the major issues is with the underlying assumptions of what is done in science and probably even more so with what is left out. This creates a mindset that is closed to some important aspects, such as spiritual aspects and experiences, and perpetuates an outdated scientific world-view. In order to understand this better, I have introduced the distinction between Science 1 and Science 2.

"Science 1" I call the practice of science. It is what scientists do and publish, the methods they use, the questions the try to answer, the debates they are having, the inventions they make, etc. It is science as everyday business. There is a great variety here and also a great variety of underlying theoretical models. This is like a huge market where you can buy mushrooms as well as pumpkin, wine as well as cutlery and you have all kinds of stalls there.

But underlying this are implicit assumptions that are rarely even discussed. It is like the unwritten rules of the market place. It is what I call "Science 2". It is the seminal insight of the philosopher Robin G. Collingwood who discovered that every scientific endeavour, in fact every human activity, has to make some assumptions that cannot be proven or argued for with the very methods it is supposed to facilitate (Collingwood, 1998, orig. 1940). He called them "absolute presuppositions". Sometimes we call this a philosophical foundation, sometimes a world-view. Thomas S. Kuhn, who is better known than Collingwood called these absolute presuppositions "paradigms" (Kuhn, 1962): ways how science is done, what generic ideas are being followed, what questions are being pursued, what methods are being employed, and consequently, what type of findings one is hoping to make. As a corollary this also defines what is implicitly left out, not studied and not found worthwhile. The paradigm defines what is our "figure", what we look at, and what is "ground", what we neglect. Now, importantly, the absolute presuppositions of a lot of what is done in science follow an implicit materialist ontology and a reductionist methodology or epistemology.

By materialist ontology I mean that we assume the final elements in the universe are of a material nature, and everything that appears to be non-material, forces, for instance, thoughts, consciousness in general terms, will turn out to be analysable in terms of those material entities. That, for instance, is the current approach of neuroscience and much of biology: matter constitutes molecules; these make up complex organic structures such as macromolecules, peptides, cell organelles, cells, organs, organism. And now all that remains to be done is understand how this huge complex machinery works in terms of physical and chemical forces and we will have understood life and consciousness. Because, so the implicit assumption goes, consciousness is only a result of neuronal activity, i.e. derived from material reality and interaction (Dennett, 1991). The same analysis holds in other areas. Granted: the old simplistic ways of thinking have long been superseded by very sophisticated complex systems models, systems biological approaches etc (Capra & Luisi, 2014). But the underlying *assumption* still is: it is ultimately material reality that will help us understand and explain how such complex reality as consciousness is being brought about.

The methodological stance behind all this is reductionist. In the same way, as we understood lightning not to be an expression of the wrath of a god we will understand how consciousness will be explainable by neuronal activity. This is what we call a reductionist explanation. And nothing is wrong with it, as long as the reductionist explanation both works and does justice to the phenomena in question.

Now the argument that I am advancing states that this is not only a heuristic of science, i.e. a tentative way of trying out whether this is a good road to insight, but it has become an entrenched belief system. Materialism is not just a useful stance, it has become a religion for many of those active in science, and thus Science 2, not always but often, subscribes to what has been dubbed the "scientific worldview" or "scientism" (Williams & Robinson, 2016). By this shorthand notation we normally mean that we assume that materialism is not just one potential way of looking at the world but the dominant and correct viewpoint, which nevertheless is a belief system, and not science as such. The ensuing reductionist methodology leads to the fact that many phenomena are not being dealt with adequately: they are either denied, ridiculed, sidelined or explained inadequately. Among them are consciousness and some important experiences that are difficult to explain (see below).

How Do We Know It Is Wrong?

Our analysis states that the critical state science is in derives from the fact that it not only subscribes to the underlying assumptions of Science 2, but that this is implicitly regarded as the best and the only "scientific" way of looking at things. This is most obvious in the way phenomena that do not fit with this world view are treated.

I describe and discuss various such categories. One type of phenomena are anomalous cognition phenomena, such as telepathy, precognition and clairvoyance. If the empirical database is looked at dispassionately we see very strong empirical evidence for all of those, which a recent review in American Psychologist brings together and discusses (Cardeña, 2018). The point is: we are never dispassionate observers, as the ideal type of science and the scientist suggests. We are all Bayesians: we have certain preconceived opinions about the world and view the empirical evidence in the light of our prior opinions. And because the "scientific world view" of Science 2 does not allow for such phenomena, they are normally neglected, disregarded or explained away.

However, if we take these results seriously we must conclude that the materialist world-view is deficient. It would at least need to allow for non-local connections, that is connections between elements of the universe that are not spatially or temporally connected by causal signals. Whether this is only possible through a model that allows for consciousness as a real and causally active entity would have to be discussed separately. But taking anomalous cognition seriously precludes a simple, Newtonian local view of the world. The minimum requirement for an enlarged view would be the stipulation of a model that allows for non-locality (Walach & Schmidt, 2005).

A second class of phenomena that are very challenging for a materialist ontology are all those cases of near-death experience that contain both a clear documentation of absence of higher brain activity and at the same time documentation of some cognitive insight, sometimes of a non-local character. Such phenomena are clairvoyant instances of knowledge gained during a near-death state without brain activity that has been verified independently. A recent collection of more than 100 cases documents such instances (Rivas, Dirven, & Smit, 2016). Even if one or more of these cases were to be revealed as fake cases, it seems very unlikely that all of them are fabricated or due to an illusion.

One might also bring in the long tradition of research into reincarnation types of reports in small children. Ian Stevenson started such a research programme at the University of Virginia and compiled many cases (Stevenson, 1997a, 1997b), while others, such as Erlendur Haraldsson have followed suit (Haraldsson & Matlock, 2016). The gist of this field work is that there are every now and again, in all kind of cultures, children who report memories of previous lives. Usually such spontaneous reports happen at the age of around 3 and 4, and as a rule without any prompting and often within families where there is a big resistance against this type of view. Some of these children have birthmarks that point to the previous type of death. In some children archival reports could be unearthed that supported the statements. Many cases remain "unsolved", i.e. some of the information can be supported, some seems to be wrong. But again the empirical fact remains that at least in some cases many of the statements can be verified. Such a phenomenon is very difficult to reconciliate with a materialist-localist view of the world.

The final argument is that any materialist ontology of the world has to be articulated through a conscious mind that makes this statement in the first place. Another way of putting this is: it is only valid if the materialist world-view can develop a concise theory of how neurons and the brain produces consciousness, including such insights. And exactly this is lacking. When analysing such models more often than not such a causal chain is simply *assumed* to hold true. But most working scientists would admit that we currently do not have such a model that explains how neurons do that. We have analogous examples how complex systems have produced something that single elements of a system can't. For instance, an orchestra, as a complex system, can produce music that each single musician will not be able to produce and all together would not be able to produce if they were not coordinated by a conductor or another principle. We have examples how neuronal nets are able to learn pattern recognition and similar things. But we have no evidence of *conscious* activity (Noë, 2009; Searle, 1992). Granted, there might be such a theory in the future. But the observation is still true that the horizon for the fulfilment of the promise of such a theory is constantly moving into the future – this is what Sir John Eccles called 'promissory materialism' (Eccles, 1980). Hence it is rational and permissible to doubt that proof will ever be forthcoming.

What Should Be Different?

We therefore propose offering a few different approaches, not as a replacement, but as a complement or extension to existing science. This is the constructive part of the report. This has two elements: one is the suggestion of a different approach to consciousness - a kind of minimum consensus model. Another element is the proposal of a generalised mode of entanglement correlations that could account for non-locality, without assuming any special forces, fields, or particles.

The model of consciousness proposed is a minimum consensus model (Walach & Römer, 2000, 2011). It will not be satisfactory to many in the spiritual community who opt for an idealist view, in which consciousness is the primary entity in the world out of which matter and everything else emerges. This view that is germane to Advaita Vedanta, but also to a classical Western idealist philosophy as in Schelling, Hegel and others seems to have the same problem as the materialist view. It needs to explain how material entities arise out of the purely idealistic substrate of consciousness or spirit. This idealist stance was the mainstream opinion among educated people in Europe, England and the US once in the 18th and 19th century. It fell out of favour exactly for this reason that it cannot really provide us with a sufficiently rich notion of matter.

Hence we feel that a better option more conducive to consensus would be a dual aspect theory, which postulates a neutral substrate or a substrate of the world which we do not know, but which presents itself in two complementary ways: as matter and consciousness. The underlying unity explains the very high, in fact perfect, correlation of the two.

Such a model had been championed by Spinoza and in a variant by Leibniz. It was used by Feigl, Jung and Pauli and has been more recently proposed by Max Velmans, one of our advisors, and ourselves (Atmanspacher & Primas, 2006; Velmans, 2007, orig. 1993, 2009). The benefit of this model is that it does not reduce consciousness, allows it its own causal role, both in respect to the body and in the world. Nor does it remove causal efficacy and reality from matter, as an idealist model does. Hence we feel it might be the best minimum consensus model that has the potential to open up a treadable middle ground.

Finally, we feel we need an explanatory model for these paranormal and other experiences that does justice to the phenomena and is rooted in our scientific discourse. We have proposed a model of generalised entanglement derived from a generalised quantum theory (Atmanspacher, Römer, & Walach, 2002; Walach & von Stillfried, 2011). This theory, it is very important to understand, is not a *physical* theory, but a systemic, general theory. It is applicable to all kinds of systems, not only material ones, and to systems of all sizes. It is more general than quantum theory. That is also the reason why it is less precise, but applicable over a more general spectrum of phenomena.

The decisive element of this theory is the following. It stipulates that situations characteristic of physical quantum systems arise also in other types of systems. More precisely, what distinguishes a quantum system from a classical system is the fact that in a classical system the measurement does not change the state of the measured object. In a quantum system, however, the measurement changes the state of whatever is measured. The prototypical example is the measurement of the momentum of an electron, which precludes the precise knowledge of its position, because the measurement of the momentum changes the position of the electron.

Now, the generalised formalism of Generalised Quantum Theory assumes that this kind of relationship will also be relevant for other than physical micro systems. Whenever the measurement changes the state of a measured object, such a formalism applies. In physics the way to deal with this situation is to introduce an algebra of non-commuting operations, because in algebraic terms the fact that the measurement changes the measured object shows as a difference in measurement outcomes depending on the sequence of measurements. This is visible in the non-commutativity of the measurements and their observables. In other words: this shows in the fact that the sequence of measurements makes a difference. The observables or variables associated with such measurements that are non-commutative are called incompatible or complementary.

In a classical system, this is not the case. If I measure the height of a person first and then the weight, the results will be identical to measurements in reverse order, weight first, and height second. Formally this is expressed as AB = BA. We know this from our Abelian algebra, where multiplying 2 by 3 yields the same result as multiplying 3 by 2, namely 6. In a quantum formalism this is not the case, because the impact of the measurement on the measured object is revealed by the fact that the sequence of the operations is relevant and a measurement in reverse order gives different results. It is as if the height of a person were different, if it is measured after the weight, which is of course silly in this example, but demonstrates the point. Formally this is expressed as AB # BA.

Now the important point is the following: we hold that there are various situations, in other cirumstances, where this is exactly the case - where the measurement impacts the measured object. We suspect that everything that has to do with consciousness is somehow affected. Consciousness is a prime example: whenever we are trying introspectively to ascertain the state of our mind, this very observation process, or "measurement", technically speaking, changes it.

Once we discover, for instance, what is bothering us, the affective state of our mind changes. This is an example of how measurement changes the measured object outside the strictly physical realm. And we could go on and demonstrate this by other examples. This may suffice to make it plausible: such a generalised quantum theoretical formalism might be useful outside physics, and it was precisely for this reason that we created it. It may be interesting to note at this point that new approaches in quantum cognition follow exactly this trail and have produced the first positive experimental results that vindicate such an approach (Busemeyer & Bruza, 2012; Pothos & Busemeyer, 2013).

It is a consequence of this formalism that it predicts non-local correlations where such a formalisation is applicable. What makes the formalism a quantum formalism is the fact that it deals with incompatible observables that describe such non-commuting operations or operations necessary to formalise situations where measurement impacts the measured object and changes it. Whenever such incompatible or non-commuting observables are present and such a formalism is applicable, it predicts, as in the physical case, entanglement correlations between elements of the system. More specifically, and abstractly speaking, the conditions for such non-local entanglement correlations to occur are the following:

- There is a system that can be separated from its environment and is distinguishable as such. Such a system could be naturally occurring or could be created by a ritual.
- Within the system there are subsystems.
- There are observables or descriptions that pertain to the system as a whole and observables or descriptions that pertain to the parts of the system.
- These descriptions are incompatible with each other.

In such a case we would expect entanglement correlations between these elements of the system, because entanglement is just a specific case of incompatibility or complementarity, namely the incompatibility or complementarity of global and local observables.

This theoretical formalism can be used to understand anomalous cognition (Lucadou, Römer, & Walach, 2007; Walach, von Ludacou, & Römer, 2014), or various phenomena in complementary medicine (Walach, 2003, 2005). It could be used

to construct a completely new approach to coordination phenomena, both within the body as well as without, with others, groups and people non-locally in space and in time. The exploration is certainly complex enough and probably also worthwhile, but we leave it with those hints. I am not saying that it is true or the only option. I am just saying: here is one way of scientifically looking at these phenomena and this perspective yields a rational understanding that can be aligned with current approaches in science. It would, however, prompt us to give up a materialist ontology and a reductionist epistemology as the only legitimate scientific approaches. But it would pave the way for a new scientific method, a kind of Science 1* that might lead into a new scientific background model beyond current Science 2 into a future Science 3 model.

There are also other models, such as field models, that postulate new kinds of fields or particles. They are certainly also possible. Whether they are easier to reconcile with current science on a theoretical level remains to be seen. We have adopted this stance because it seems to be most parsimonious and more closely aligned with current mainstream ideas about physics. In any event, the purpose of this exercise is only to show that it is necessary, possible and feasible to construct other models that then allow for a much broader outlook. If the Galileo Project has achieved this, it has achieved what it was set up for.

The Road Ahead

Now the next step would be to propagate these ideas and generate a discussion and a broad public discourse. We have set up a web-site that collects resources, and may perhaps offer training programmes for students and young researchers, ideally summer schools at universities, and finally a curriculum. Another way forward would be a dedicated series of conferences that target opinion leaders in science to discuss these issues and make the process publicly available. And a further important element would be to address journalists and the media to challenge outdated views about science, where Science 1 is still equated with Science 2 or scientism illicitly and implicitly. The webpresence of the Galileo Project is a first useful starting point.

Professor Harald Walach *is a researcher at the interface between medicine, psychology and consciousness studies. Currently he is affiliated as a professor with Poznan Medical University in Poznan, Poland, and as a visiting professor with the University Witten-Herdecke's psychology department in Germany. He is founding director of the Change Health Science Institute in Berlin. He is author of more than 170 peer reviewed papers, 14 books, and 100 book chapters.*
Contact: Prof. Harald Walach, hwalac@gmail.com

Harald Walach speaking at the Galileo Commission Report launch at the Oxford and Cambridge Club

References

Atmanspacher, H., & Primas, H. (2006). Pauli's ideas on mind and matter in the context of contemporary science. *Journal of Consciousness Studies, 13*(3), 5-50.

Atmanspacher, H., Römer, H., & Walach, H. (2002). Weak quantum theory: Complementarity and entanglement in physics and beyond. *Foundations of Physics, 32*, 379-406.

Busemeyer, J. R., & Bruza, P. D. (2012). *Quantum Models of Cognition and Decision*. Cambridge: Cambridge University Press.

Capra, F., & Luisi, P. L. (2014). *The Systems View of Life. A Unifying Vision*. Cambridge: Cambridge University Press.

Cardeña, E. (2018). The experimental evidence for parapsychological phenomena: A review. *American Psychologist, online first*.

Collingwood, R. G. (1998, orig. 1940). *An Essay on Metaphysics* (revised ed.). Oxford: Clarendon Press.

Dennett, D. C. (1991). *Consciousess Explained*. Boston: Little, Brown & Co.

Eccles, J. C. (1980). *The human psyche*. Berlin: Springer.

Hands, J. (2015). *Cosmo Sapiens. Human Evolution from the Origin of the Universe*. London: Duckworth.

Haraldsson, E., & Matlock, J. G. (2016). *I Saw a Light and Came Here: Children's Experiences of Reincarnation*. Hove, UK: White Crow Books.

Horton, R. (2015). Offline: What is medicine's 5 sigma? *Lancet, 385*, 1380.

Ioannidis, J. P. A. (2005). Why most published research findings are false. *PLoS Medicine, 2*(8), e124.

Kuhn, T. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

Lucadou, W. v., Römer, H., & Walach, H. (2007). Synchronistic Phenomena as Entanglement Correlations in Generalized Quantum Theory. *Journal of Consciousness Studies, 14*(4), 50-74.

Noë, A. (2009). *Out of Our Heads: Why You are Not your Brain, and Other Lessons from the Biology of Consciousness*. New York: Hill & Wang.

Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science, 349*(6251), aac4716.

Pinker, S. (2018). *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress*. London: Penguin.

Pothos, E. M., & Busemeyer, J. R. (2013). Can quantum probability provide a new direction for cognitive modeling. *Behavioral and Brain Sciences, 36*, 255-327.

Rivas, T., Dirven, A., & Smit, R. H. (2016). *The Self Does Not Die. Verified Paranormal Phenomena from Near-Death Experiences*. Durham, NC: International Association of Near Death Studies.

Searle, J. R. (1992). *The Rediscovery of the Mind*. Cambridge, MA: Massachusetts Institute of Technology Press.

Stevenson, I. (1997a). *Reincarnation and Biology: A Contribution to the Etiology of Birhtmarks and Birth Defects*. Wesport, CT: Praeger.

Stevenson, I. (1997b). *Where Reincarnation and Biology Intersect*. Wesport, CT: Praeger.

Velmans, M. (2007, orig. 1993). A Reflexive Science of Consciousness. In G. R. Bock & J. Marsh (Eds.), *Experimental and Theoretical Studies of Consciousness* (pp. 81-99). Chichester: Wiley.

Velmans, M. (2009). *Understanding Consiousness*. London: Routledge.

Walach, H. (2003). Entanglement model of homeopathy as an example of generalizsed entanglement predicted by Weak Quantum Theory. *Forschende Komplementärmedizin und Klassische Naturheilkunde, 10*, 192-200.

Walach, H. (2005). Generalized Entanglement: A new theoretical model for understanding the effects of Complementary and Alternative Medicine. *Journal of Alternative and Complementary Medicine, 11*, 549-559.

Walach, H., & Römer, H. (2000). Complementarity is a useful concept for consciousness studies. A reminder. *Neuroendocrinology Letters, 21*, 221-232.

Walach, H., & Römer, H. (2011). Generalized entanglement - A nonreductive option for a phenomenologically dualist and ontologically monist view of consciousness. In H. Walach, S. Schmidt & W. B. Jonas (Eds.), *Neuroscience, Consciousness and Spirituality* (pp. 81-95). Dordrecht: Springer.

Walach, H., & Schmidt, S. (2005). Repairing Plato's life boat with Ockham's razor: The Important Function of Research in Anomalies for Mainstream Science. *Journal of Consciousness Studies, 12*(2), 52-70.

Walach, H., von Ludacou, W., & Römer, H. (2014). Parapsychological phenomena as examples of generalized non-local correlations - A theoretical framework. *Journal of Scientific Exploration, 28*, 605-631.

Walach, H., & von Stillfried, N. (2011). Generalised Quantum Theory—Basic idea and general intuition: A background story and overview. *Axiomathes, 21*, 185-209.

Williams, R. N., & Robinson, D. N. (Eds.). (2016). *Scientism: The New Orthodoxy*. London: Bloomsbury.

Thinking the Unthinkable: Ancestral Memories and Consciousness

Dr Natalie Tobert

My grandfather was born in Poland and carried to England in his mother's arms as a baby in 1900. His parents left Kraków after Russian pogroms in the 1890's. Due to shifting political boundaries, my grandfather didn't know if he was of Russian or Polish origin. He was naturalised as British at 46 years old. My parents, my sister and I were brought up as British: we had nothing to do with Poland. No food, no language, no customs, no history. We were British. We had a silent invisible ancestral history.

Throughout my young life, I'd heard about Nazis and concentration camps but I never read, listened to or watched anything. My mother always said: "*there is no such thing as god, as he wouldn't have allowed Nazis*". Both my parents were Jewish, but somehow I wasn't touched by faith.

I recently returned from a trip to Poland, where I facilitated a retreat on ancestral memories: participants explored the effects of unspoken histories around memories, and beliefs on death, dying and beyond. We discussed cultural knowledge around survival beyond death and its influence on spirituality, mental health, and extreme inner experiences. Then on the last days we addressed dilemmas around understanding mental illness. We were extremely grateful for the hospitality of our hosts at the Sichów Educational Foundation.

I stayed in Kraków for several days before flying home to London. I found the town so sophisticated: fabulous religious and secular architecture, the medieval barbican, marvellous flourishing markets, concerts every night, fine restaurants. The town was so elegant, so civilised. However, I thought the unthinkable:

I wondered about consciousness, mental well being, and the unspoken history of that place.

There were thousands of tourists wandering around garden walkways surrounding the Old Town and the Main Square. Information boards helpfully set out the history of place. And as I walked around I couldn't help but wonder, how could it be that the population of

Krakow were so sophisticated to create these fabulous gardens, the magnificent Cloth Market, the Basilicas, and this architecture?

Thinking the Unthinkable

Again I thought the unthinkable: how could the Polish people have witnessed the extermination and expulsion of their 100,000+ Jewish population and Catholic dissidents? I didn't understand how it could be that people were forced by Occupation, to tolerate this. I realised on reading Beata Bishop's 'novel' about life in Nazi occupied Hungary[1], that there was profound resistance, and silent housing protection of Jewish friends and neighbours. Also in Poland our host's family had housed Jews, questioned Nazi practices, and severely paid for it. In Poland around 3 million people (mostly Jews plus around 75,000 others including Catholic intelligentsia) were sent to concentration camps, including Auschwitz-Birkenau, Majdanek, and Treblinka I (to name just a few). I wondered how the silence about this history affected today's populations of Krakow and the wider area of Poland. I wondered how Diaspora people behaved, when they had a history of expulsion and extermination, how did they behave towards others?

Nazi Concentration camps around Europe[2]

During our retreat in Poland at Sichow Duzy, our hosts Paul and Amber Kieniewicz kindly took us to visit the memorial at Chmielnik: a reconstructed synagogue with a glass *Bimah* (an elevated platform for reading the Torah). This was built of glass so the souls of the deceased would light it up. Before 1939, the town's population was made up of 80% Jewish people. Today there are none. Our hosts also suggested we visit the Kielce memorial.

Personal Memories

May I explain why this journey to Poland was so important to me and of what relevance it was to mental health and expanded consciousness in general? When I was in my 20's, I myself appeared to tune into someone's life who was held in a concentration camp in Dachau Bavaria, during the Nazi Holocaust. I remembered many details in technicolour: running away through the forests, being saved, housed then betrayed, trapped and imprisoned, being medically investigated and raped in a hospital, and then exterminated in the gas chambers just two days before the US army went in to free people.

Throughout these 'memories' which I was gifted over ten years in my 20s and 30s, I knew who I was, as Natalie, and I could distinguish who that person there in the medical experimentation camp was. I could witness both what happened to them (an aspect of myself?), and when we were led to the showers, for the final solution, I knew what was going to happen. I died angry at such a waste of shortened lives.

Options for interpretation

How might we interpret my experiences? Were they ancestral memories from a real (but unknown) family history? Were they ancestral memories from a past life of mine, or from someone else's past life, which I had somehow tuned into? Did I have a series of experiences of extra-ordinary empathy, or profound focused clairvoyance? Did I tune in remotely to another person's traumatic experiences? Did I access the Akashic realms, or some other field of consciousness, in an unsolicited manner? Did I experience spirit attachment or possession, or over those ten years was the whole series of memories, my spiritual imagination?

Where did the data of this remote perception come from? Did I have false memory syndrome, or not? I thought it could not have been epigenetics, as all my biological ancestors were in UK before Nazi practices, though they had experienced Russian pogroms. Some people claimed it was cryptomnesia: a memory which appeared to be new, but was recalled from TV, book or radio. That interpretation didn't fit my own understanding. However, these experiences made me ask myself whether I was born free, or did I

enter this Natalie existence as a new born with a package of old experiences to address?

Other Peoples' Memories

I discovered I was not alone: many people had what appeared to be past life memories of Nazi concentration camps, and I present a handful below. In the UK the SMN member and psychotherapist Elise Wardle had recurrent dreams, and a fear as a child of using her school's communal showers[3]. In Israel the author Yael Shahah experienced nightly terrors, and had memories of working as a guard at Birkenau concentration camp[4]. She felt as if she lived in two realities at once.

The German peace activist Rabbi Gershom interviewed 250 people who claimed they had reincarnated from Nazi Holocaust times, and wrote that the majority of his clients were not Jewish[5]. However, there was Canadian writer Alison Pick, who was brought up as a Christian. She had a spiritual crisis, and discovered her father had not been told that he was Jewish and his family had perished in the Nazi Holocaust[6]. She wrote: "*I came to understand it on a bodily level, deep in my cells below my rational mind… The unfelt grief had been passed from my grandmother to my father to me, like an heirloom". "..the depression I suffer from has always felt pre-formed, ancient, like it was given to me in its entirety at birth.*" Alison had been born Christian, was not told about the manner of her grandparent's demise, but faced unknown trauma in her body.

Proposition

I am aware some people chose to discover information about their past lives through using specific practices and rituals. I did not do that. Based on details above, my assumption is:

- Those people mentioned above spontaneously tuned into a remote life, and became aware of it in their minds and at a bodily level.
- Myself, I spontaneously tuned in to a remote life, in my mind and with cellular memory. It felt like a kind of remote perception across time and space.

What is the point of discussing this? My proposition is that thousands of other people also tune into remote lives (unsolicited), but they may not be able to witness or distinguish between this present life consciousness now, and that life then. Perhaps they became anxious and distressed? Perhaps they got labelled with mental illness or schizophrenia? I am wondering how many readers find feasible the interpretation of 'remote life memory'. In every society those in authority define what is accepted / acceptable common consensus about this interpretation of lived experience. Who amongst us has the power to define what is delusional and what is not? These issues affect so many people's well being, that I feel it is important for each of us to stay aware about the kinds of beliefs we are comfortable with.

Spiritist Perspectives

While our group was in Poland we watched a video of the Tibetan Book of the Dead[7]: we saw that Tibetans assumed clear consciousness continued after death, when it separated from the body. The deceased had perception and could view their relatives, and so prayers were said to ensure they did not cling to the human present. For many days the chants of a priest escorted the deceased away from their body towards the light. Indigenous American people also believed it was possible to communicate with spirits of the dead: rituals upon death were to ensure the spirit reached its home in the afterlife. Reincarnation beliefs were common[8].

One perspective of those who held spiritist beliefs was that at the time when people were killed or exterminated suddenly, they may not know they were dead. Those who were suddenly killed or who died in an accident may not be aware their body had died: an aspect of their consciousness may wander around earth's planes, overshadowing living people who expressed similar emotions that they recognised. This may be an awkward issue for us to discuss regarding global mental health in today's world.

I wondered, could it be that our mental health in the West has become more severe, both as a result of present trauma, but also as a result of traumatic events which resulted in sudden death? Is it possible those people who are labelled with schizophrenia, may unwittingly have had the unquiet dead invade their body / mind? This might be considered a kind of spirit possession[9]? Or might they have experienced unsolicited profound empathy with an ancient or living person's experience?

Such perspectives and cultural understandings are not accepted universally: beliefs considered normal in parts of China, Africa, Australia, Americas or India, may be considered delusional in the west. This conflict of interpretation mattered because it influenced how people were treated when they had disturbing inner experiences or remote perception. Particularly people who were new migrants or refugees may be pathologised.

Health, Cultural Perspectives and Beliefs

Our beliefs are critically important when it comes to mental health interpretation and treatment. Research from Yale University USA[10] found clinicians treated conditions differently: their beliefs had implications about effectiveness of psychotherapy or medication, and therefore their choice of treatment options for patients. The sociologist Carpenter and his colleague Raj[11] suggested there was "*a grudging recognition that mental health services have too often acted in oppressive ways, particularly to groups facing other forms of discrimination on the basis of gender, 'race', religion, age, ethnicity and sexuality*".

Today we now acknowledge our ways of understanding health, illness and disease form part of our belief systems, which vary with ethnicity and religion. Thus people interpret their symptoms of distress, then select healing strategies that conform to their theories of illness causation. Medical anthropologist Byron Good[12] noted in the past we used the word 'belief' in a pejorative manner, assuming it to be culture bound, erroneous and mistaken. In contrast western knowledge was assumed to be objective and correct. Non-western perspectives around mental well being were discussed in detail in my latest book[13].

Multiple Narratives Around Belief

Western trained psychoanalysts or psychiatrists might claim such examples of indigenous people illustrated primitive or delusional beliefs. Transpersonal psychotherapists might suggest there were other ways of understanding divine consciousness. Spiritists might claim from their own direct cognition that they accept indigenous people shine a clear light of understanding on consciousness after death.

In our society the beliefs of whoever had authority or was in power were taken to be agreed common consensus.

Remote Perception: How Do We Move Forward?

I hope it is possible to further discuss the discourse around mental wellbeing and remote perception within the SMN's Galileo Commission project: to explore consciousness beyond the brain, and ways it influences people who are deemed by materialist ways of understanding, to have 'mental health problems' or schizophrenia. Let us meet together with all stakeholders around the same table, compare the phenomenology of experiences (with or without distress), and discuss any outmoded basic assumptions around human experiences. Let us have an open ended inquiry around human inner experiences towards an expanded science, beyond a materialist worldview.

A recent PhD awarded to Brian Spittles by Murdoch University in Australia1[4] made a significant contribution towards a better understanding of psychosis. The author provided us with systematic substantive arguments as to why radical change is required. He gathered evidence which enabled us to examine psychosis though a range of materialist and metaphysical contexts. He explored the historical ebb and flow of beliefs around psychosis, then suggested western psychiatry limited our scope for understanding psychospiritual experiences.

As well as acknowledging insights by western scholars, Spittles also presented metaphysical perspectives from indigenous peoples and eastern Buddhist philosophies. He invited a paradigm shift within psychiatry, similar to examples in Brazil where mainstream doctors have worked together with traditional healers for the last 50 years. Change is occurring: in UK a new group British Spiritist Medical Association was recently set up by Brazilian scholars to include doctors, psychiatrists and health care practitioners, with Peter Fenwick as Chair.

What About Silent Ancestral Histories?

I raised issues around psychism and clairvoyance, remote perception and non-local consciousness, where people were able to tune in to other existences, other times and spaces. The experiences mentioned above raised awareness of the differences between deliberate psychism and spontaneous unsolicited psychism (which with distress was usually labelled psychosis). This included remote viewing which may be deliberate and intentional, or which may be confusional caused by distress of unsolicited experiences. There are people labelled with mental health problems and schizophrenia, who may tune into other lives but not be aware: they may be mislabelled, over medicated, and misrepresented by academics who study religious /spiritual experiences.

There was a silent history around my grandfather's place of birth, and in examples I have given, a deliberate suppression of ancestral memories. Migrants and refugees may carry more trauma being expelled from the country of their birth, or seeing relatives exterminated. There is also silent invisible trauma of people resident in a country where acts of war took place, but were not acknowledged or healed: *"I would like to tell you about my country and that emptiness I have been exploring or that has been drawing me in for so many years*[15]*."* I feel we need to find some way of acknowledging past exterminations and expulsions. I'd like to see us honour multiple narratives for understanding consciousness and interpreting human inner experiences.

***Dr Natalie Tobert** is a medical anthropologist, who offers collaborative training on cultural diversity, specialising in mental well being, She conducted original research in Africa, India and London, and has had four books published. Natalie plans another retreat in Poland, autumn 2019. Contact: natalietobert@gmail.com*

References

1 Bishop B 1960, One Spoilt Spring, Faber and Faber, London

2 Nazi Concentration camps around Europe https://www.google.com/maps/d/viewer?ll=54.033586%2C15.776366999999937&spn=11.631921%2C19.775391&hl=en&gl=us&oe=UTF8&msa=0&z=5&source=embed&ie=UTF8&mid=1Yqt_cbT5G86GG_BCYBvcaGXmgE4

3 Wardle E 2015 Memories of the Holocaust and Questions of Past Lives . J Psychiatry 18:220

4 Shahah Y Ovadya Ben Malka 2015, A Damaged Mirror: A story of memory and redemption, Kasva Press

5 Gershom Y 1996, From Ashes to Healing: Mystical Encounters with the Holocaust, A.R.E. Press

6 Pick A 2015, Between Gods, Tinder Press

7 Tibetan Book Of The Dead. https://www.youtube.com/watch?v=_CIVvJsQPvk

8 https://www.funeralzone.co.uk/blog/death-around-world-native-american-beliefs

9 Palmer T 2015 The Science of Spirit Possession, Cambridge Scholars Publishing, Newcastle

10 Woo-kyoung A, Proctor C, Flanagan E, 2009. Mental Health Clinicians' Beliefs About Biological, Psychological, and Environmental Bases of Mental Disorders, Cognitive Science, Vol 33, no 2, 147–182

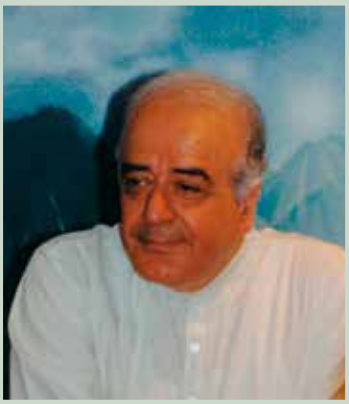
11 Carpenter M and Raj T. 2012 Editorial introduction : towards a paradigm shift from community care to community development in mental health. Community Development Journal, Vol.47 (No.4). pp. 457-472

12 Good B 1994, Medicine, Rationality and Experience, Cambridge U P

13 Tobert N 2017, Cultural Perceptions on Mental Wellbeing: Spiritual Interpretations of Symptoms in Medical Practice. London: Jessica Kingsley Publishers

14 Spittles B 2018, Better Understanding Psychosis: A Psychospiritual Challenge to Medical Psychiatry, Murdoch University, Australia

15 Personal communication, Lucja Nowak October 2018



This is the first part of an essay written for the launch of the Galileo Commission Report – the second part proposes some practical steps in the light of what follows. Please email me if you would like the full essay. It is based on the final chapter of Emilios' book ***Science, Objectivity and Consciousness.***

A Galileo Moment

Emilios Bouratinos, Richard Grant & Vasileios Basios

Why an expanded science?

In his final gift to science and mankind, Stephen Hawking has postulated that the universal origin story does not require God because science can answer all the questions about the big bang and what existed prior to the big bang. Hawking says that at the beginning of time, the singularity that comprised the entire universe existed as a homogeneous particle without the concept of time. And that without time, nothing, not even God, existed. An increasingly recalcitrant Roger Penrose has put forth the idea that the universe has had an untold number of big bangs and evidence of prior abrupt expansions are visible in the present universe.

Imagine a universe that reaches the final stages of its accelerating expansion, when even atoms have been pulled apart into a quark and gluon stew. A universe where gravity and space-time have been stripped, allowing information to exceed light speed – and consciousness, seeking complexity, collapses what it can into a singularity that explodes into space-time and an expanding universe accelerated by the dark, detached remnants of what could not be collapsed in the prior universe. In essence, a universal reincarnation story.

Science and religion have often been at odds with one another. In fact, science can trace its origins to alchemy whose practitioners were mostly mystics and astrologers. Far from an adherence to a code or method, early science was the study of how to bring god like powers to the individual. Throughout history, there are figures who were able to navigate the shifting ground of what science offered and what religion offered without becoming dogmatic about either – Sir Isaac Newton and Galileo Galilei come to mind (although neither had smooth relations with authority figures in either realm).

The model presented by these figures has become less influential and modern people tend to be polarised into one group to the exclusion of the other. Once this happens, well known psychological and sociological forces of group dynamics take hold and members tend to support group positions that they might not support on their own. This tendency to advocate group opinion is both genetically and historically encoded in virtually all complex animal groups, but reaches its height in human beings. As we peer nervously over the fence at the "others", we are driven to adopt more and more extreme positions at the risk of being cast out of our own group.

And so, there are two groups, one believing only in sense-mediated facts and the other only in faith of underlying guiding forces. There is a component of human activity that is required to live a life of any kind of sanity: what science would call objectivity – and religion faith. And while both groups lay claim to objectivity on the one hand and faith on the other, both groups express objectivity and faith. We must have conscious confidence that our observations about air and breathing confirm our unconscious faith that our next breath will contain the air we need to breath. Confidence is useless without faith that gravity is universal and we won't float off into space or have our planet crash into the sun. We must have faith that our beliefs are in fact true. A faith that says "my group is on the right path." Even though it is at the root of so many problems, we cannot simply say that faith is itself wrong, it fills the balloon of purpose with the very air it needs to rise above the seeming indifference, and all too often cruelty, of life. But faith is what science attempts to excise from all that it expresses – if there is no sense based proof, then whatever it is, it simply does not exist. Nature and reality don't work that way.

The problem with faith arises when we don't accept the premise of something on faith, and instead, force a premise onto something to match our faith. In science, this practice is called self-locking objectification, and unfolds in five stages. In the first stage, the scientist picks out those elements from his perceptions that serve the idea he has of himself and what he is researching. In the second stage, these elements are turned into hard, immovable ideas and rules. In the third stage, the scientist abstracts these hardened elements from their natural embeddedness in reality. In the fourth stage, he locks mentally not just into his abstraction of the elements, but into their most obvious conceptual implications. And finally, the scientist projects those abstractions both onto all he perceives subsequently and on how he makes sense of his observations. He can not see the world as it is, or even as his senses dictate, and now constructs the world out of what his self-locking points of view dictate.

When confronted with experimental results from early experiments on sub-atomic particles using criteria borrowed from the operation of elements or molecules, Werner Heisenberg wondered: "Can nature possibly be so absurd as it seemed to us in these … experiments?" Quantum theory was created when physicists realised that their results from sub-atomic experiments could not be classified as "experimental", at least not in the way they had been using the term for other types of experiments. What they were seeing were not results, but probabilities of results. As we step back from such a concept, can we really consider that recording the probability of a result is a real thing? As in, is it something that one can say constitutes an object that can be grasped, understood, manipulated, interpreted? A probability has no "thingyness" as we understand things with our sense-based reasoning. It is a description of something that might exist, or might not – depending on the prevailing winds.

And yet, there is meaning in the not-quite-thingness of quantum theory. A chance to gain a deeper insight into the form actually taken by nature. If we suppose that physicists have locked into a particular point of view, we can wonder if what a physicist conceives as probabilities on the quantum level is no more than non-objectifiable reality breaking through to a reality dominated by self-locking objectifications. And to be clear, this non-objectifiable reality as expressed by quantum mechanics does not say that some exotic particles are exhibiting non-local, non-temporal behaviour in a particle accelerator – no – it says that the fundamental nature of every object everywhere is based on the probability of results. It seems that the only thing in the universe that treats things in the universe as hard objects are modern scientists!

In our book, Science, Objectivity, and Consciousness, we acknowledge scientists' and in particular physicists' attraction to a theory of everything, and propose that a theory of everything is impossible without a rigorous examination of the role consciousness plays in the complexification of the universe -- a process that started with the Big Bang and led to atoms, stars, planets, life and eventually the human mind. Much is made of the requirement that the basic constants of the observable universe be as they are to either prove a guiding divinity or the presence of a multiverse where some universes don't result in life, but ours is one of the special ones that does. In Science, Objectivity, and Consciousness, we propose that neither is required when consciousness, in the form of a unifying whole stimulating and responding to a fragmented base attracting simpler things to form more complex things, is both the guide and result of nature and the cosmos.

The universe's basic constants of gravity, strong and weak forces, light speed are as they are because they evolve from consciousness' requirement for further complexification. Without a limit to the speed of light, there could be no time, or separation of information from a receiving and sending entity. Without gravitational constants, gases could not collapse into stars that explode to create even more complex materials that ultimately lead to life itself. *The universe is exactly as it needs to be because that is what is required for it to be as it is.* The particular details that enforce the nature of the universe are intricately tied to the general expression of the consciousness that underlies it.

But consciousness is not even on the radar of cosmologists, physicists, chemists, or biologists. Even though on the one hand they use consciousness to explore elements of their field of study, and on the other, consciousness is both the cause and result of the things they are studying. We are today no closer to understanding the origin of human consciousness than we were a thousand years ago.

Informing an expanded science

Science is limited by self-locking objectifications, and increasing specialisation of the people doing the science. As a result, there is a profound need for an expanded science that draws on insights from other fields. Science, Objectivity, and Consciousness calls an expanded science, a *science toward the limits*. Inspired by William James' radical empiricism, a *science toward the limits* would allow us to explore the things we continue to sweep under a Cartesian rug since the discovery of non-locality and non-temporality in quantum physics. But there can be no evolution of a *science toward the limits* until we develop ways to stimulate cross discipline communication and intuitive breakthroughs. And most critically, there can be no further meaningful advancement of our understanding of the physical world until we have exhausted research into the consciousness that informs it.

Before we can proceed toward an expanded science, we must reacquire a technique that offers guidance and a yardstick to measure the effectiveness of our approach. The best method for our object dominant society is to tap into the reality at hand and its interwoven wholeness through interpersonal dialogue as currently expressed in the various forms of Bohmian Dialogue, gathering individuals from relevant disciplines to discuss the requirements, direction, and epistemology of an expanded science will inform the process with the wisdom present in the collective unconscious. But even before we can start having guided discussions, we need to investigate how interpersonal dialogue works in tribal societies, how it worked in ancient times, and how it works today through the work of proponents like Parker Palmer, William Isaacs and Patricia Shaw. The insights should be collected, cross-referenced and composed into a single method for obtaining collective wisdom. It is anticipated that the composite method may

lead to other, currently unknown techniques that will facilitate rapid adaptation as what we learn changes what we question.

The following ideas outline how interpersonal dialogue could be used to address the many challenges that face an expanded science. Each time there is a major problem, challenge or opportunity open to debate, a core of humble, well-informed and dedicated individuals will establish a knowledge field through interpersonal dialogue to discuss the issue. Members will be chosen based on the exact mix required to examine the issue at hand and its dynamics. Hopefully, organisers of the event will not only consider specialists, but also consider non-specialists based on the wholeness component of the topic to be discussed. A few of the chosen members, preferably one or more specialists and non-specialists, will have had some wholeness training to assist in the focused development of the group's discussion.

Once the group has been convened, an attempt will be made to articulate the questions to be discussed. Although the subject is known in advance, no attempt to clarify it should be made before the group begins discussion. The definition of the exact area to be covered is the ongoing business of those dealing with it, not of the organisers of the meeting. It is often the case that as one exchanges ideas about something, other aspects come to view that hitherto had been ignored. After the group has marked out its direction, participants will contribute their most significant information on the subject using dialogue punctuated by silence. As others do the same, their most thoughtful insights will be offered about the subject while allowing the shifting perception of what the subject is to evolve with the discussion.

Exchanges between participants will be pursued with one sole purpose – that of obtaining the best answer possible to the question debated. There must be a firm understanding of this coupled with a firm intention of participants to persevere. As long as these are held, wholeness itself will articulate its relevance to the present moment and the present interests by bringing to the foreground some of the hidden aspects that will prove critical to new insights and new understanding. The willingness (and ability) of the dialoguing individuals to keep their ego out of the exchange, will lead to this without effort.

We call the unconscious collective wisdom accessed by these techniques a new Delphic oracle. During ancient times, the oracle at Delphi advised cities and individuals through the collective wit of priests, who made sense of the inchoate pronouncements of the entranced Pythia. Herodotus mentions that something similar occurred in an oracle dedicated to Amon-Ra in Egypt. Priests there divined the will of God by interpreting together the movements of children playing freely in the temple precinct. If we are to proceed on the path to faithfully representing nature as she really is, we need to use the tools nature provides us to find the truth and understand its relationship to other truths.

Intermediate steps

Now that we have a new Delphic oracle to find truth and confirm the efficacy of its relationship to nature's non-objectifiable form, we need a means to use it to transform our existing science into an expanded science. We can't just apply all of our objective techniques to represent a reality that neither wants nor offers an approach to do so. Quantum mechanics and cracks in other disciplines like biology and chemistry show that to be untenable. Besides which, the quality of our answers from our new oracle, as it relates to representing nature in her true form, will in large part depend on the quality of our questions. How can we know what questions to ask if we are so firmly locked into our objectifications that we can't even see or explain the dark energy and dark matter that comprise the bulk of the universe?

We are going to need a stepping stone that gets us beyond our self-locking objectification, through the door of wholeness integrated with fragmentation and onto the shore of a universal sea filled with the consciousness now attempting to understand itself. What we propose to bridge the gap between science and an expanded science is the creation of a new field of study, a *self-reflective interdisciplinary science of consciousness*.

Our new field of study needs to be self-reflective because we the observers need a different epistemological base to prevent self-locking objectification. We simply cannot continue to treat numbers, fields, tendencies, dimensions or indirect influences using the light of our understanding of how strictly delineated objects behave and how they relate in linear time or container space. Vision-mediated comprehension (and its offshoot object-mediated reason) limit the interpretation of the data. Nor can we expect to jump from a ship of fragments isolated from the whole and each other, to a sea of appreciation of the oneness of being and becoming that will be so crucial to confront objectification. We will literally need to become different people. People capable of using both hemispheres of the brain to simultaneously experience oneness and multiplicity. In order to advance a science of consciousness that culminates in an expanded science, there will be the urgent need for understanding the oneness of being and becoming, just as in order to cultivate an understanding of the oneness of being and becoming there will be an urgent need for an effective science of consciousness.

Our suggested science of consciousness needs something else. Scientists cannot specialise in a science of everything, and that is exactly what would be required to specialise in a science of consciousness. We must complete an interdisciplinary overview of theoretical physics, theoretical biology, social and physical anthropology, epistemology, history of civilisation, psychology, philosophy of mathematics, and – yes – comparative religions. Data from these sources will help us restore wholeness to our vision. But by sources, we don't intend to limit the overview. Instead, we mean such natural and mental components as the properties of fields, the successive levels of organisation, informed intuition, information coming through non-local and non-temporal conduits, and indirect interdependencies. The data from such a broad list of sources can weave a multilayered, trans-informational, inter-conceptual, inter-functional and cross-rational web of understanding, that together will make far better sense of both consciousness and the world than the present object mediated rational. Like the parable of the blind men and the elephant, consciousness is not something that

can be described by the established use of language, the technical inquiries of philosophy, elaborate mathematical theory, the physical sciences, or the laboratory tests in medicine, neuroscience and cognitive psychology. In order to form a complete picture of the elephant, the blind men must use their knowledge of their sensory fragments to transcend what they cannot see by finding among themselves a new way of seeing.

What is the meaning of consciousness that we are seeking to research when we talk about a science of consciousness? By consciousness we do not mean a synonym for mind or awareness. Still less do we mean that which appears with humans, the birth of the critical faculty, the invention of language, or even the appearance of life. Consciousness plays "the" key role in the creation of physical reality itself – a fifth force added to the other four making up nature according to the standard Copenhagen interpretation of quantum mechanics. It acts as the unifying agent pulling together the weak nuclear force, the strong, electromagnetism and gravity, thus giving them form, structure, cohesion and drive. Consciousness is a "contextually emergent property (Jordan and Ghin)" of the great self-organising system that keeps the universe evolving in and through time and space. In the beginning, this self-organising system just brings things together. It extracts quality from quantity and order from chaos. It reflects what the etymology of the ancient Greek word for intelligence (euphyia) suggests: "to grow well." The end product of the exercise is homo sapiens itself.

A *self-reflective interdisciplinary science of consciousness* will probably consider useless any further research into the physical origins of human consciousness in the brain. Nevertheless, it should continue trying to find the physical mechanism through which consciousness interacts with the brain and the rest of the body.

There always comes a moment, as you follow a path, when you realise that you have taken the wrong turn. But this realisation presupposes that you have walked long enough on the wrong path to realise that it is wrong. It takes as much patience to find where you've made a mistake as it takes to find where you've made the right choice. As Erwin Schrödinger points out, we cannot evict consciousness from the scientific arena and then claim triumphantly that we haven't found it by applying the scientific method! You cannot find what you are not disposed (or able) to look for, and a very important step will have been taken by scientists when they begin to incorporate this realisation into their work. A *self-reflective interdisciplinary science of consciousness* will be as much about finding out about reality as it will be about finding out what it is that prevents us from so doing.

To function on a deeper level, a *self-reflective interdisciplinary science of consciousness* will have to push for four specific goals. The first is a new version of reductionism. Writing about neuroscience's explanatory gap, John Horgan notes: "Like a precocious eight-year old tinkering with a radio, mind scientists excel at taking the brain apart, but they have no idea how to put it back together again." Horgan's insight suggests that the new brand of reductionism here suggested needs to push the analytical process all the way down to the wholeness that holds the reducible parts together, qualitatively as well as structurally.

The second goal that a *self-reflective interdisciplinary science of consciousness* will have to pursue is to stop considering repeatability a necessary condition for validating experiments. There is already a plethora of indications that, even in chemistry, some experiments are not literally repeatable. Environmental components differ, often in unpredictable ways. As John Horgan points out, "the putative cornerstone of science is the ability to replicate experiments and thus results. But replicability poses a special challenge to mind-science because all brains and all mental illnesses differ in significant ways."

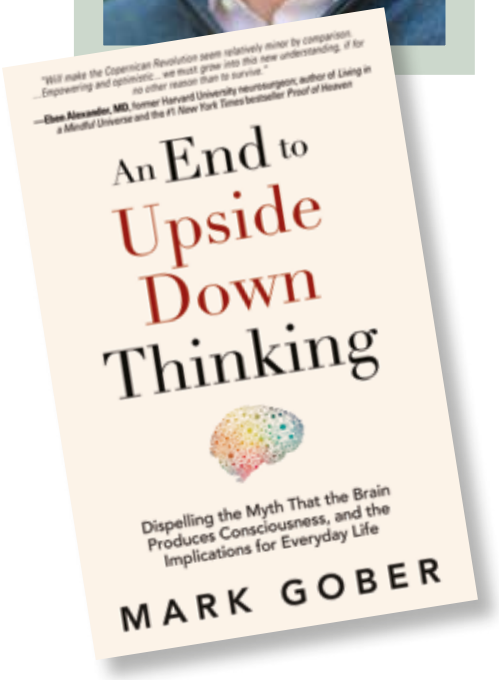
The third goal is an offshoot of the second. Though reductionism will always remain a useful tool for certain measurable jobs in science, it no longer can be seen as the only valid tool for investigating nature, particularly living nature. There is need to introduce an alternative tool, and that is wholeness. This will prove useful particularly in biology and neuroscience. At the same time, a sense of wholeness can help neuroscience discover the reality and usefulness of non-measurables like intuition, aesthetic satisfaction, empathy or remote cognition, which reflect important functions of consciousness. Furthermore, a sense of wholeness will help neuroscience to jump the conceptual barrier separating non-measurables from measurables.

Fourth, and finally, a sense of wholeness will help neuroscience see that if it would fathom the role of quantity in consciousness research, it must first develop a taste for, and an ability to access, qualitative understanding. Accurate description of what happens in the brain cannot be held up as a sample of quality. The technique created to promote this kind of investigation must remain conscious not only of the kind of discipline it is developing into, but of how the said discipline may continue to develop without getting stuck on what it discovers in the present. Consciousness investigators will thus empower themselves to constantly translate their findings into new premises, theories and methodologies as a matter of course.

How we proceed to expand science to realise a "science toward the limits" is bound to our willingness to engage in an interim course of action to remove the obstacles put up by self-locking objectification while diving into the wholistic experience of the universe in the form of a *self-reflective interdisciplinary science of consciousness*.

Faced with the choice between changing one's mind and proving that there is no need to do so, almost everyone gets busy on the proof.

John Kenneth Galbraith 1908-2006



Shifting the Paradigm around Consciousness and why it is essential

Mark Gober

One fact is certain: given that you are reading this article, you have consciousness — a subjective, inner experience or awareness of being alive. Your consciousness is not a physical thing that you can touch, but it is unquestionably present at this very moment as you read these words. We all have it. But what does science know about its origin?

If you had asked me about consciousness over two years ago, I would have said it is a product of complex chemical reactions that occur in the brain. That's what mainstream science teaches. I studied psychology at Princeton University and have spent the last ten years working in finance and business strategy, so I've been entrenched in mainstream thinking.

Questioning paradigms

But in August 2016, I first heard podcasts that made me question mainstream perspectives. After then researching extensively for a year, I wrote the recently published *An End to Upside Down Thinking* (Waterside Publishing, October 2018). The book compiles scientific evidence that challenges the view that consciousness comes from the brain.

In the course of my research I was stunned to learn that *Science* magazine listed consciousness second in its list of the biggest mysteries remaining in science ("What is the biological basis of consciousness?"). As a society we have achieved incredible feats. We can send people to the moon, we have developed complex computing devices, we've learned how to modify genes, and much more. However, we still don't know the basis of something as basic as our own consciousness. This fact continues to shock me.

In *An End to Upside Down Thinking*, I argue that we are asking the wrong question. *Science* magazine's question presumes that there is a biological basis of consciousness. But what if our biology (i.e., our brain) does not produce consciousness at all? What if the brain instead acts more like a filtering mechanism for a consciousness that is not localised to or produced by the body? In other words, what if our consciousness exists beyond the physical body? These questions have massive implications for how we think about human potential and even life and death. In my view, the accumulation of strong scientific evidence in a diverse set of domains suggests that, indeed, consciousness is *not* a product of the brain. And furthermore, a single, underlying consciousness which connects us all is the basis of the physical world.

Quantum reality

One such domain is quantum mechanics. Its findings led Nobel Prize-winner, Max Planck, to state in 1931: "I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything we talk about, everything that we regard as existing, postulates consciousness."

A phenomenon known as the "observer effect" in quantum mechanics points in this direction, as demonstrated by a study called the double slit laser experiment. In this study, a particle behaves like a particle only when it is observed. When it is not being observed, it behaves like a wave of probability (i.e., it doesn't have a definite location). So the studies suggest that the observer is affecting the behavior of physical matter simply by observing it. This notion is totally counterintuitive but has been shown over and over to be true.

The big question is: what is causing this effect? Is there some physical mechanism that can explain the findings, or is the consciousness of the observer steering physical reality? Physicists have debated these topics for decades, but some have stated that consciousness might be playing a role. For example, Nobel Prize-winning physicist Eugene Wigner said, "It is the entering of an impression into our consciousness which alters the wave function," adding, "it is at this point that the consciousness enters the theory unavoidably and unalterably."

In the last several years, this idea has been explored further. Dr. Dean Radin, Chief Scientist at the Institute of Noetic Sciences, ran 17 studies over an eight-year period in which he and his colleagues asked people to focus their mental attention on a double slit apparatus. His hypothesis was that if consciousness is indeed playing a role, then the particle's behavior should be altered. Sure enough, Dr. Radin's studies showed strong statistical effects which suggest that consciousness is steering the behavior of physical matter. His findings (which unfortunately have not garnered the attention they deserve) were published in *Physics Essays* (2012 and 2013) and *Quantum Biosciences* (2015). These remarkable results have since been replicated by Gabriel Guerrer at the University of São Paulo, who stated in his March 2018 paper: "A post hoc combination of the formal experiments' scores… provided statistically significant results favoring the existence of anomalous interactions between conscious agents and a physical system. Further studies are warranted to formally test the post hoc hypothesis."

Non-local, "psychic" abilities

If consciousness is not a product of the brain and is instead more fundamental than physical matter, then "psychic" phenomena become possible. As the basis of reality, consciousness can be thought of as existing beyond all space and time. Therefore, it is conceivable that a person could access information that is not localised to his or her body.

There is in fact evidence for many psychic phenomena. For example, the U.S. government ran a more than 20-year program in which it used psychic spies for national security. In 1995, the United States Congress and the CIA asked Dr. Jessica Utts to examine whether psychic phenomena were proven. In fact, Dr. Utts is a reputable statistician who was named the 2016 president of the American Statistics Association. In her publicly available report she stated: "Using the standards applied to any other area of science, it is concluded that psychic functioning has been well established. The statistical results of the studies examined are far beyond what is expected by chance. Arguments that these results could be due to methodological flaws in the experiments are soundly refuted."

Similarly, the CIA recently declassified documents from this program. One such document discusses a psychic ability known as "remote viewing," which is the ability to perceive something from far away, without seeing it with one's eyes (sometimes called "clairvoyance"). The declassified document states that remote viewing is "a real phenomenon," that the "evidence [is] too impressive to dismiss as mere coincidence," and that the "implications are revolutionary."

Additionally, in May 2018, Lund University professor Dr. Etzel Cardeña's findings on the scientific evidence for psychic abilities were released. The results were published in *American Psychologist*, the official peer-reviewed academic journal of the American Psychological Association. Dr. Cardeña's findings are clear: "The evidence provides cumulative support for the reality of [psychic phenomena]. … The evidence…is comparable to that for established phenomena in psychology and other disciplines." The fact that such a mainstream journal published these findings is hugely significant.

Surviving bodily death

If consciousness transcends the brain and body, then we would expect consciousness to continue when the physical body dies. There is indeed evidence that points in this direction. For example, the study of near-death experiences suggests that a lucid consciousness exists even when the brain is highly impaired or even fully "off." Cardiologist Dr. Pim van Lommel studied the experiences of patients in cardiac arrest, during which blood is known to stop flowing to the brain. Yet in 18% of cardiac arrest survivors studied by Dr. van Lommel, lucid memories were reported. The findings are difficult to explain under conventional models of the brain, which predict that a significant amount of brain activity would be needed to produce such lucid experiences. And yet a non-trivial number of survivors reported clear memories in spite of having a dysfunctional brain. The results were published in 2001 in the prominent peer-reviewed medical journal, *The Lancet*.

In a similar study conducted by Dr. Sam Parnia and his colleagues, a cardiac arrest survivor reported specific, accurate details of what happened in his hospital room. His recollections occurred during the time of cardiac arrest in which his brain should have been completely nonfunctional. As Dr. Parnia puts it: "In this case, consciousness and awareness appeared to occur during a three-minute period when there was no heartbeat. This is paradoxical, since the brain typically ceases functioning within 20-30 seconds of the heart stopping and doesn't resume again until the heart has been restarted. Furthermore, the detailed recollections of visual awareness in this case were consistent with verified events."

Additionally, at the University of Virginia's Division of Perceptual Studies, Drs. Ian Stevenson and

Jim Tucker have examined more than 2,500 cases over fifty years in which young children describe details of a previous life. The children are typically between the ages of two and five years old, and their memories are sometimes so specific that the researchers are unable to devise a conventional explanation. In some cases, the children have birthmarks and physical defects that match how they described dying in the previous life. The most compelling cases are ones in which the researchers were able to find medical or other historical records verifying that such individuals in fact existed.

Why isn't this generally accepted yet?

I often find myself wondering why these findings aren't more regularly discussed in mainstream circles. Dr. Utts comments on this topic: "Most scientists reject the possible reality of [psychic] abilities without ever looking at data!…I have asked the debunkers if there is any amount of data that could convince them, and they generally have responded by saying, 'probably not.' I ask them what original research they have read, and they mostly admit that they haven't read any!"

This dynamic is eerily similar to what Galileo faced when certain members of the clergy refused to look in his telescope. History has shown over and over that paradigm shifts are resisted. Perhaps the looming consciousness revolution is one that future historians will add to their list.

World-changing implications

When taken together, the accumulated evidence points toward a new picture of consciousness. Consciousness doesn't come from the brain; rather, the brain (and our entire physical reality), is an experience within consciousness itself. This idea argues for a rethinking of what it means to be human. Furthermore, by acknowledging the primacy of consciousness we might see major advances in science, medicine, technology, and beyond.

But to me, the biggest implications are around how we might treat one another under this new paradigm. What the research collectively points to is the notion that we are all fundamentally connected as part of the same underlying consciousness. So even though we appear to be separate, at the deepest level of consciousness we are the same. Under this paradigm, it becomes irrational to do harm to another: in harming another, one would be harming one's "self" as part of the same consciousness.

The world today is in obvious disarray. I would argue that most, if not all, of the problems we see are tied to a belief that we are fundamentally separate. But what if that idea is scientifically incorrect? What if consciousness doesn't come from the brain and is instead the fabric of reality, connecting us all? As Nobel Prize–winning physicist Erwin Schrödinger concluded: "In truth, there is only one mind."

To me, the study of consciousness isn't just an intellectual exercise. It's much bigger than that. It might be necessary for world peace and even the survival of our species.

Mark Gober is an author, a Partner at Sherpa Technology Group in Silicon Valley, a former investment banker with UBS in New York, and former captain of the Princeton tennis team. His worldview was turned upside down in late 2016 when he was exposed to world-changing science which suggested that, contrary to mainstream assumptions, consciousness is not produced by the brain. After researching extensively, he wrote ***An End to Upside Down Thinking*** *to introduce the general public to these cutting-edge ideas – all in an effort to encourage a much-needed global shift in scientific and existential thinking. Mark also serves as director of corporate relations for Nobel Peace Prize nominee Dr. Ervin Laszlo's Institute of New Paradigm Research. For more information, see www.markgober.com.*

References

1 "125th Anniversary Issue." Science magazine website. http://www.sciencemag.org/site/feature/misc/webfeat/125th/.

2 "Interview with Max Planck." The Observer, January 25, 1931.

3 Wigner, Eugene Paul. "Remarks on the Mind-Body Problem." In The Scientist Speculates, edited by I. J. Good, pp. 284–302. London: Heinemann, 1961.

4 Wigner, Eugene Paul. "The Place of Consciousness in Modern Physics." In Philosophical Reflections and Syntheses, edited by Eugene Paul Wigner and Jagdish Mehra. Berlin: Springer, 1997.

5 Radin, Dean, et al. "Consciousness and the Double-Slit Interference Pattern: Six Experiments." Physics Essays 25, no. 2 (2012): 157–71 and Radin, Dean, et al. "Psychophysical Interactions With a Double-Slit Interference Pattern." Physics Essays 26, no. 4 (2013): 553–66.

6 Radin, Dean, et al. "Psychophysical Interactions with a Single-Photon Double-Slit Optical System." Quantum Biosystems 6, no. 1 (2015): 82–98.

7 Guerrer, Gabriel. "Consciousness-Related Interactions in a Double-Slit Optical System." Open Science Framework (March 9, 2018). doi: 10.17605/OSF.IO/QDKVX.

8 Utts, Jessica. "An Assessment of the Evidence for Psychic Functioning." Division of Statistics, University of California, Davis, 1995. http://www.ics.uci.edu/~jutts/air.pdf

9 "Project Sun Streak." Unpublished CIA report, approved for release August 8, 2008. Available for download at www.cia.gov.

10 Cardeña, E. "The Experimental Evidence for Parapsychological Phenomena: A Review." American Psychologist (May 24, 2018). Advance online publication. http://dx.doi.org/10.1037/amp0000236.

11 van Lommel, Pim, et al. "Near-Death Experience in Survivors of Cardiac Arrest: A Prospective Study in the Netherlands." The Lancet 9298 (2001): 2039–45. http://www.thelancet.com/journals/lancet/article/PIIS0140673601071008/fulltext.

12 Parnia, Sam et al. "AWARE—Awareness during Resuscitation—A prospective study." Resuscitation (2014), Volume 85, Issue 12, 1799 – 1805.

13 International Association for Near Death Studies. "AWARE Study Initial Results Are Published!" IANDS webpage, July 18, 2017. https://iands.org/resources/media-resources/front-page-news/1060-aware-study-initial-results-are-published.html.

14 Utts, Jessica. "Appreciating Statistics." Journal of the American Statistical Association 111 (2016): 1373–80. https://www.tandfonline.com/doi/full/10.1080/01621459.2016.1250592.

15 Schrödinger, Erwin. What Is Life? With Mind and Matter and Autobiographical Sketches. London: Cambridge University Press, 1969.

Galileo Commission Correspondence:

Circulation of the Galileo Commission Report generated a large volume of correspondence from over 30 advisers, resulting in a revision of the summary argument printed above and also in this interesting exchange:

From Dr Iain McGilchrist

Dear colleagues and friends,

First, thank you so very much to all who put in such a great effort to get this together. And apologies that I come late to the party, and that I cannot be at the meeting.

Joan [Walton] asks 'given that many of us have understood that science could be pursued within an expanded worldview for many decades, why have the efforts of all those on this listing, and the powerful writings of many, not made more impact on mainstream society generally, and on our public institutions such as universities more specifically?' I think the main reason is fear. In the first place, most of the great discoveries of science of the past were made by independent individuals working with only basic equipment and often alone (many were clergy). They were true scientists, because they asked the important big questions and kept their minds open.

Nowadays science is an industry, practised factory-fashion, with huge empires, awards, egos at stake, and dependent on vastly expensive machinery. No young scientist now dares step out of line if he or she wants a career, and the more established ones have everything to lose by doing so. As a result, true science is practised less and less. It takes huge moral commitment and courage to think less narrowly, but without thinking differently no great discoveries are made. In the second place, broadcasters and journalists are afraid of appearing foolish by giving any credence to anything other than scientism (and are also now locked into huge, inflexible bureaucratic systems); and the humanities have lost their nerve, for a host of reasons, and just want to ape what they see as 'science', but which is in fact scientism.

Why does this matter? Because if we are to get through, we must not be seen to disparage science, which is in enough trouble already for the above reasons. We must not only be, but be seen to be, inclusive, not exclusive. We all need healthy science – without it we are all lost, at least if any argument is to have purchase; and it is not as if the current science paradigm, deeply mistaken as I believe it to be, has met with no success. That must be acknowledged, or we frighten the horses before we can get in the saddle. Much as Newtonian mechanics is mistaken, it is very helpful in very many situations. The problem is the narrow view.

Organisms are not in the least like mechanisms, but mechanism is a perfectly useful way of looking at tiny details in a complex picture. The problem is thinking that the same thinking will help you understand the whole, which it can't. So we want, in the words of the better US title of Rupert [Sheldrake's] "The Science Delusion", "Science Set Free". We are the liberators, not the besiegers, of science. We can afford to be magnanimous, but that does not stop us making powerful points. For example, it is not that, taking the narrow view, agribusiness does not work: it's that in the broader view it is disastrous, because we don't see what it is we are missing.

How do you come to see what it is your narrow vision by definition excludes you from seeing? In this situation some people, perhaps most, cannot be helped: they will never look down the telescope. But there will always be some who will, and need our encouragement. What makes current science particularly uncomfortable is any breath of inconsistency (a sure sign of moribundity), which has the perverse effect of discouraging any shifts in the paradigm.

But what needs to be emphasised is that current science makes

unscientific assumptions, because that is an inconsistency that must be addressed by the mainstream, who merely assume that they make no assumptions. To take one example, there is no single shred of evidence that matter gives rise to consciousness, and some reason from contemporary physics to believe that consciousness is prior to matter. And, of course, as has been pointed out, the demand that science accept only what can be empirically demonstrated is itself not an empirically grounded or demonstrable demand. Once one gets into this territory, we become the ones to ask the difficult, scientific questions, putting the bureaucrats who speak for science on the back foot, rather than being on the back foot always ourselves. And we can show them what it is they may be missing by being too narrow in their assumptions.

So, in brief, I think our claim must be not that there is something wrong with science, but that what passes for science nowadays is not scientific enough, and that as a result we are missing great potential discoveries and stultifying the human mind.

From Paul Kieniewicz:

Dear Iain

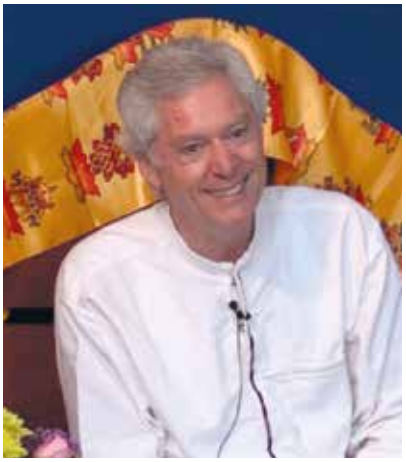
I think that you express very well some of the reasons why scientism is the ruling ethos today when it comes to scientific research. Yes, there is fear, fear of no funding, reputation and so on. But what is behind it all? Why did things come to this pass? Could things have evolved in a different direction?

One issue that needs some discussion is the centuries-old campaign to exorcise the ghost of religion. Beginning with the Enlightenment, but certainly throughout the nineteenth century science has been on a roll, to do away with anything that smacks of religion and spirituality. To be fair, many of the edifices built on Aristotelian and Thomist principles needed demolishing --- the Earth-centred universe, the age of the Earth, the origins of species - the entire narrative of how life began end evolved, the human soul --- Freud was determined to banish the idea of a soul. Later he and Jung came to blows on this one. Vitalism was also a target.

The march of science during the nineteenth century was one of taking down whatever religion had built, breaking free from the constraints of religion. Instead of divine intervention "blind chance" became a favourite agency. It did away with the need for teleology and spirituality. This doesn't mean that scientists were atheists. Many were religious people, but they maintained a strict separation between truths based in spirituality, and those of science. I am quite sure that many scientists' prejudice today against the paranormal is rooted in this historical conflict.

Various scientists I have tried to dialogue about the paranormal dismissed the subject, because of the association with spirituality --- which for various reasons they rejected. Open the door a crack, and God might just sneak in! Curiously, many religious people are also hostile to studying the paranormal. Martin Gardner, the mathematician and arch debunker, was a devout Catholic. The hostility of some religious people to the paranormal seems to be because paranormal phenomena might lessen the need for faith --- for belief in the absence of evidence. Such evidence could also conceivably make faith less necessary. Either way, paranormal phenomena are seen as a threat to religious dogma. Many Christians are very disturbed by news of NDEs where the Buddha, and not Christ is the presence that is observed.

The Galileo report is courageous because it crosses over from the religious to the scientific. The main argument is that were the role of science expanded, both the spiritual and religious could coexist under one umbrella. Very few initiatives have tried this. The Copernicus Project in Krakow, for example, often has lectures of religion and science, but most speakers --- while acknowledging the validity of both, still keep them in separate silos. One author started by talking about the Big Bang, then ended with the biblical creation story. There was no attempt at reconciliation. I think it is time to try to change that narrative --- even though the task is daunting. we are dealing with centuries of historical baggage, religious prejudices that are unlikely to change. Will it be well received, say among philosophers of science, or other university departments? I sure hope so.



From Dr Alan Wallace:

As has happened countless times in the past, the situation here is one of a David & Goliath face-off. Beginning in the 1860s, Thomas Huxley (David) sought to overthrow the authority of the Church of England (Goliath) in his promotion of materialism by sending out the message that this worldview alone was compatible with science; and his ideal of global domination of scientific materialism has proven remarkably successful.

But now, 150 years later, materialism, rooted in a 19th-century, mechanistic view of the universe, has been discredited by cutting-edge physics, it has failed to make any progress in solving the mind-body problem, and its domination of mental health has resulted in a plethora of psycho-pharmaceutical drugs that treat only the symptoms of mental disease, without ever healing even one. Mental diseases are increasing exponentially, even as scientific understanding of the brain and the proliferation of psycho-pharmaceutical drugs increase exponentially.

Intellectually, materialism is bankrupt and can no longer be deemed "scientific." Pragmatically,

the effect of the deeply interrelated triad of materialism-hedonism-consumerism is proving catastrophic for the ecosphere and for the preservation of human civilization. On rational and empirical grounds, one might assume that materialism would be on the swift decline, but instead its influences continues to increase. Why? Those promoting it are well organized and control vast resources of money, influence, and prestige. They are the new Goliath, and if we of the Resistance (David) are to overcome them, then we need to organize internationally and cross-culturally with diverse groups with whom we share a common vision of non-reductionist views of the universe, the role of consciousness in the natural world, and human nature.

This seems to me to be the real challenge. Non-materialists actually outnumber materialists worldwide, but they control the popular and scientific media, sources of scientific funding, academia, and government policy. I think this is where the real brainstorming needs to take place, rather than tossing another non-reductionist manifesto into the wind (and I've thrown quite a few myself, only to find them widely ignored by the media, academia, and the scientific community), only to see it vanish into thin air.

PS As the only aphorism goes, the truth will prevail. We just need to be patient, persevering, and absolutely committed to overcoming the tyranny of materialism. Just to be clear, I'm a firm advocate of everyone, including materialists of course, having the rights of freedom of belief and of expression. But people don't have the right to lie, and the notion that there is anything scientific about materialism in the 21st century is a lie.

From: Prof Neil Grossman

I have been using the terms "science" and "scientific" in its epistemological sense. Science is a methodological process of discovering truths about reality. Insofar as science is an objective process of discovery, it is, and must be, metaphysically neutral. Insofar as science is not metaphysically neutral, but instead weds itself to a particular metaphysical theory, such as materialism, it cannot be an objective process for discovery. There is much confusion on this point, because many people equate science with materialist metaphysics, and phenomena which fall outside the scope of such metaphysics, and hence cannot be explained in physical terms, are called "unscientific". This is a most unfortunate usage of the term. For if souls and spirits are in fact a part of reality, and science is conceived epistemologically as a systematic investigation of reality, then there is no reason why science cannot devise appropriate methods to investigate souls and spirits. But if science is defined in terms of materialist metaphysics, then, if souls and spirits are real, science, thus defined, will not be able to deal with them. But this would be, not because souls and spirits are unreal, but rather because this definition of science (in terms of materialist metaphysics) has semantically excluded nonphysical realities from it scope.

After-Death Communications (ADCs)

Evelyn Elsaesser

Here Evelyn presents a two-year SMN research project – an investigation of the phenomenology and impact of perceived spontaneous and direct After-Death Communications (ADCs).

Introduction

A spontaneous After-Death Communication (ADC) occurs when a mourner unexpectedly perceives a deceased person through the senses of sight, hearing, smell, or touch. Very commonly, persons who experience an ADC (experients) solely "feel the presence" of the deceased person or perceive a contact or a communication during sleep or hypnagogic states. Perceived ADCs occur frequently, with an estimated 25-50% of mourners having experienced one or more spontaneous ADCs. Testimonies collected in different countries and since the last century suggest this phenomenon to be *universal* and *timeless*. Despite their widespread occurrence, perceived ADCs, paradoxically, have been little researched and are absent from the media and public discourse. As a consequence, experients usually have no frame of reference in terms of which to understand, integrate and fully benefit from this experience which doesn't match mainstream conceptions of reality. Whatever the ontological status of perceived ADCs might be, they are perceived as real by a great number of persons and therefore certainly deserve their place on the consciousness research agenda.

Research objectives

The first objective is to describe the **phenomenology** of perceived ADCs. The data collected are expected to provide insights into the profile of the experients; the profile of the deceased person supposedly initiating the contact (including cause of death); the circumstances of occurrence; the type, unfolding and message of perceived ADCs; emotions and sense of reality associated with the experience; and potential differences between countries.

The second objective is to analyse the **impact** of perceived ADCs on experients. The following questions will be examined: What is the impact of perceived ADCs on experients? Are there implications for the grieving process? Do these experiences change experients' conception of death and their belief system? Does the national and social context influence individuals' experiences and their impact?

The third objective will consist in **disseminating the research results** as widely as possible to the scientific community and the general public. By collecting information about how perceived ADCs occur and unfold, and by analysing their impact on individuals' lives, we aim at making these results accessible to people who face the death of a close relative, partner or friend, and to the general public. Following an applied research orientation, we will emphasise in our conclusions the relevance of our results for the public, and highlight possible policy implications. The research project will contribute to raising awareness about perceived ADCs and have a practical impact on a large number of persons.

Data and methodology

This international 2-year research project which started on 1st of February 2018 is led in several European countries and the United States. The collection, analysis and comparison of data of 200

participants will provide insight into the supposedly universal nature of this phenomenon, making this the first comparative ADC research.

Participants will be invited to complete an online survey about the perceived ADC they experienced and about some key socioeconomic characteristics. On the basis of this specially designed online questionnaire – available in English, French and Spanish – data will be collected in Switzerland, France, Great Britain and Spain. This data will allow us, using descriptive statistics, to depict the main characteristics about our sample and the different profiles of ADC experients.

The online questionnaire will be available as of 1st August 2018, at https://www.evelyn-elsaesser.com/research/

Finally, for participants who will have previously agreed to the anonymised publication of their testimonies, the collected data will be archived in a multi-lingual, international, open access database, hosted and up-dated by the University of Northampton. This database will eventually be available on a dedicated website to the scientific community for further analysis and to the general public, in order to make the perceived ADC phenomenon more visible in society.

Project team

The project team, led by the Swiss expert on experiences around death Evelyn Elsaesser, is composed of Prof. Chris Roe (PI) and Dr. Cal Cooper (University of Northampton, UK), and Prof. Lluis Pastor (Universitat Oberta de Catalunya, Spain). The Scientific Committee comprises Prof. Kim Penberthy (University of Virginia, USA), Prof. Peter Fenwick (UK), Prof. Kenneth Ring (USA), and David Lorimer (SMN).

Impact of the research study

Following an applied research orientation, we will emphasise in our conclusions the relevance of our results for the general public. We aim at bridging science and spirituality by shedding light on this major social phenomenon which is currently hidden since it challenges mainstream concept of reality. For the purpose of information dissemination and knowledge transfer to the public, we will publish a short and accessible version of the results of the study, explaining the ADC phenomenon, its impact on experients, and the broader implications of these experiences (possible survival of consciousness after bodily death). A more in-depth analysis of the research findings, illustrated with testimonies, will be published as a monograph.

Professor Kenneth Ring has conducted a research identifying the effects of information about near-death experiences (NDEs) on individuals who have never had such an experience themselves. What he labeled the "benign virus hypothesis" shows that exposure to NDE material – and in particular if the persons could listen to and exchange with NDE experiencers – has a strong and lasting effect on those individuals. *"Through these testimonies, we can see how it is not only possible for persons open to NDEs to learn from them, but to internalise their essential insights and make them their own"*[1] . We believe the same psychological mechanism will hold true for information dissemination on ADCs.

Furthermore, we will address groups of the population more immediately concerned with ADCs like individuals dealing with the grief of bereavement (in the context of bereavement associations) and those facing death (in palliative care centers). ADCs could also be discussed in advanced school classes in order to allow undergraduates to think and talk about death, rather than making the subject taboo and generating anxiety which is as unfounded as it is harmful. Professor Allan Kellehear has had very encouraging results which what he calls "death education"[2] by addressing the phenomena around death, spreading the word in community settings and encouraging discussions.

Our research findings and hypotheses will also be presented to the scientific community by means of presentations at conferences in the field of consciousness research and by publication of papers in scientific journals. Considering the lack of research and knowledge on ADCs, we expect the results of this exploratory research to open up further questions. Hence the project could also enable us to specify new research hypotheses which may be pursued in the future in the frame of a large scale research, involving research teams in different countries.

Evelyn Elsaesser *is an expert on death-related experiences, notably Near-death experiences (NDEs) and perceived spontaneous and direct After-death communications (ADCs). She is the author of numerous books, articles and book chapters on these topics, including* ***Lessons from the Light****, co-authored with Kenneth Ring,* ***On the Other Side of Life****, and* ***Talking with Angel about Illness, Death and Survival****. Her latest book Quand les défunts viennent à nous is dedicated to perceived spontaneous and direct ADCs. Evelyn Elsaesser is co-founder and member of the Executive Committee of Swiss IANDS (International Association for Near-Death Studies) and coordinator for Europe of IANDS. She has served for many years as coordinator of the Swiss branch of the Scientific and Medical Network (SMN).* https://www.evelyn-elsaesser.com/

1. Ring, Kenneth, Elsaesser, Evelyn (Repr. 2006) Lessons from the Light: What we can learn from the near-death experience. – Moment Point Press, p. 213
2. Kellehear, Allan (2015) Death Education as a Public Health Issue. IN: Death, Dying and Bereavement: Contemporary Perspectives, Institutions, and Practices, ed. Judith M. Stillion and Thomas Attig. – New York: Springer

The Scientific and Medical Network Annual Gathering 2018

Evolving towards a Wise and Flourishing Future

Hardin Tibbs

The Network's annual gathering took place this year at Horsley Park in Surrey during the first weekend in July. The gathering began on the Friday evening with a welcome and introduction by **Dr Paul Filmore** *and* **Dr Peter Fenwick**. *The programme was concerned with the future, focusing on such topics as the cultivation of effective future consciousness and the factors required for the creation of a good future.*

Chris Bache

The first event, after dinner on Friday, was a video talk by Professor Chris Bache titled: *Diamonds from Heaven: A 20-year Psychedelic Journey*. This talk was recorded at the International Transpersonal Conference in Prague in September 2017. It was an account of his 20-year journey to discover the nature of reality using 73 high dose LSD sessions conducted between 1979-1999. He described this remarkable psychedelic journey as the "philosophical adventure of a lifetime".

Chris is a professor of philosophy and religion and approached the journey in a rigorously disciplined way. He made 400 pages of notes, and even kept a record of the prevailing astrological transits, using astrology to fix the times of his sessions. He described moving far beyond personal reality, and being in contact with an infinite intelligence that spoke to him from many different levels of reality.

His sessions went progressively deeper, through repeated stages of intense suffering and cleansing, followed by initiation into higher or deeper levels of existence, and successively wider and deeper visionary revelations. In what he called the higher archetypal level he encountered vast, ancient galaxy-like creator beings. At the lower archetypal level he saw that humanity is a single organism, and experienced the intelligence of our collective psyche.

He saw that we are coming to a time of collective awakening and the birth of a future human, in which we will share a collective psychic oneness. He was shown that there is an infinite succession of increasing depths of numinous reality, but came to see that the spiritual task ultimately lies "back here" in everyday reality. He also came to understand that humanity is built for accelerated evolution. His work is a remarkable testament to the acceleration of collective evolution that is more and more apparent in the world today, and a confirmation of the importance of the work of the SMN.

Tom Lombardo

On Saturday morning, the keynote presentation was delivered by Professor Tom Lombardo, who spoke on the topic of what he calls future consciousness, which is also the subject of his book *Future Consciousness: The Path to Purposeful Evolution*. In an expertly crafted and densely informative three-hour presentation – thankfully there was a break midway for coffee – he addressed the question: how do we create a good future? This, he said, is the central challenge of human life.

The most distinctive and empowering feature of the human mind is the capacity to have emotions, desires, and goals about the future. We consciously imagine, think about, and evaluate envisioned futures, and intentionally and methodically pursue preferable futures. This multi-faceted psychological ability is what he calls "future consciousness." He believes it has enabled our conscious minds to achieve an "evolution in evolution" – a jump to purposefully directed evolution.

Our task now, through the heightening of future consciousness, is to flourish in the flow of purposeful evolution and create a good future for ourselves, human society, and the planet. This can be done, Tom said, through the development of character virtues in all the major dimensions of the human mind, including emotion, motivation, purposeful behaviour, learning and memory, knowledge and understanding, thinking and imagination, creativity, and self-evolution.

He identified wisdom as the highest expression of future consciousness and said it should serve as a guiding light for our own personal evolution and the future of human society. A key practical step towards this is the creation of ideal future narratives. We should aspire toward living "wisdom narratives" as pathways to a good future and the creation of a "wise society".

Finally, he argued that science fiction often serves as an expression of future consciousness, providing awareness and imaginative inspiration for the ongoing purposeful evolution of humanity, a theme he has taken up in his next book, *Science Fiction: The Evolutionary Mythology of the Future*. In summary, this presentation was comprehensively detailed and elegantly argued – as is his book – and represents a significant landmark in our understanding of how to face the future constructively.

Harald Walach

After lunch on Saturday, Professor Harald Walach presented a preview of the report he has written for the SMN's Galileo Commission. This report, called *Science Beyond a Materialist Worldview*, is intended to stimulate debate about the underlying worldview of science and its effect on the scope of science in the future.

The current practice of science is largely based on underlying assumptions that most scientists are taught to take for granted. Unfortunately these assumptions are increasingly and unnecessarily restricting the advance of science itself.

Harald identified the main problematic assumptions as being: matter regarded as the sole constituent of reality (as opposed to simply being the objective of science); reductionism, the idea that complex wholes can be fully understood by being reduced to their constituent parts; the independence of observation, the idea that observation and experience are independent of guiding theoretical frameworks; the either-or binary logic of theoretical analysis; and the adequacy of the so-called Golden Rule – which is to act towards others as we would have them act towards us – as an adequate basis for governing the ethical practice of science.

Perhaps the most problematic of these is the fact that many or even most scientists subscribe to a "materialist ontology" – the belief that nothing but material substance exists. Science is widely regarded as having proved the materialist ontology, while in fact, as traditionally practiced, it has simply assumed a materialist ontology. The question of ontology (the fundamental nature of what exists) is metaphysical, meaning that it is not something that can be proved scientifically – materialism is simply an axiom of classical physics. Unfortunately, as Harald put it, axioms cannot be proved by the methods they prescribe and support. Yet the received idea of the scientific worldview is synonymous with the materialist worldview.

An important consequence of the materialist assumption is that any attempt to take consciousness seriously as a reality in its own right is currently excluded from mainstream scientific discourse. Although there is much pioneering research into fields such as spirituality and anomalous cognition, they are persistently resisted by the scientific establishment, which regards consciousness as nothing but the subjective experience of brain functioning.

The aim of the report is to uncover the underlying assumptions of science and show that they are in fact open questions, and as such they should not be used to restrict science to its currently unnecessarily narrow scope. Harald has a double PhD in clinical psychology and in the history and theory of science and has done a skilful job, walking a fine line through a complex and potentially controversial topic.

He also takes a philosophically sophisticated ontological position – what he describes as "a kind of monistically neutral but phenomenologically rich dual aspect theory in which material and mental or conscious phenomena are both irreducible". This technically valid formulation is advantageous because it keeps open the question of whether or not mental phenomena arise from material phenomena or arise independently, showing that scientists can legitimately keep an open mind on this point while remaining rigourous.

Erik Øverland

The second presentation on Saturday afternoon was given by Dr Erik Øverland, President of the World Futures Studies Federation in Berlin, who spoke about the relationship between futures research and transcendental philosophy. HIs objective was to establish a philosophical foundation for Futures Research. He drew on a reading of Immanuel Kant, as seen in the light of the more recent philosophy of Bruno Latour.

At the outset he highlighted two significant challenges faced by Futures Research: first, that statements about the future are constructions in the present, not the present of future situations, and second, that they are impossible to falsify. This renders problematic any ambition Futures Research may have of scientific knowledge building.

Turning to Kant's transcendental philosophy, he pointed out that Kant's concern had been precisely the question of how any sustained scientific knowledge building is possible (given the radical scepticism of Hume). Kant referred to fundamental questions about the knowability of the world as antinomies, since they could be given convincing and opposed answers by pure reason. Kant's response to this impasse, Erik said, was to turn "the ontological and epistemological question upside down". Instead of trying to show how subjects and objects are connected, Kant asked instead how a sustained dichotomy between them is possible in general. What made it possible to see nature continuously as object, as other, so that it could be studied by science over time?

Here, Erik made a link with the constructivist philosophy of Bruno Latour. According to Latour, reality is constructed and Erik proposed that it is this continual process of construction that maintains the dichotomy between the human as subject and nature as object.

Tom Lombardo, in his earlier talk, quoted Julian Huxley who had said, "Man is nothing but evolution become conscious of itself." Erik said he would add, "…made possible by our continuous construction of what we are not". Latour also argued that not only is there a continual construction of this distinction, but that in modernity the resulting scientific knowledge leads to the creation of hybrid combinations of nature and culture.

Erik suggested there was a direct parallel between all this and the construction of knowledge in futures studies. The act of anticipating possible futures contributes to contemporary reality – it constructs the aspect of reality that arises as a result of our ambition to know the future. We are constructing what we anticipate will be the distinction between the human and the non-human in the future – and the imagined future distinctions lead to imagined hybrids of science and nature that shape our conception of future culture.

(Note: this description is a best effort attempt to convey the content of Erik's presentation, made challenging by the difficult language of social constructionism combined with translation from his native German.)

Barry Mapp

The third presentation on Saturday afternoon was given by Barry Mapp, who suggested that the creation of a good future depended on more than simply the core set of character virtues that Tom Lombardo argued were the means for holistic enhancement of our capacity for future consciousness. In addition, Barry proposed W Edwards Deming's "system of profound knowledge" as a set of essential skills for enhancing future consciousness and creating a good future.

Deming was an American statistician and management efficiency guru who launched the Total Quality Management movement in the 1980s. Deming's principles were widely adopted, particularly in Japan where they were closely associated with the rise of Japanese manufacturing after the Second World War. Ironically his ideas were taken less seriously in his home country, which contributed to the coincident decline of American manufacturing.

Barry explained that Deming's system of profound knowledge consisted of four types of improvement knowledge: first, knowledge of the system that is being improved; second, knowledge of variation – the application of fundamental statistical principles to achieve product quality; third, knowledge of knowledge – an understanding of the theory of knowledge and its limits; and fourth, knowledge of psychology, in particular abandoning the practice of rewarding or punishing workers to improve quality, since their performance depends on quality variation arising from the structure of the system.

Barry described a number of technical aspects of Deming's system: the funnel experiment which demonstrates the essentials of statistical quality variation; the combination of the null hypothesis and the Fisher statistic, which allows the testing of statistical significance when sample sizes are small; the importance of distinguishing signal from noise in statistical data; the Plan-Do-Study-Act (PDSA) cycle, a learning and improvement cycle based on the scientific method; and (recalling Tom Lombardo's remarks about wisdom) seeing wisdom as the source of the initial probability estimation when using Bayes' Theorem for identifying the source of quality defects.

In short, Barry argued persuasively that improvement of our future depends on improvement knowledge, which Deming's system gives us.

John Kapp

The fourth presentation on Saturday afternoon was given by John Kapp, who talked about the future of the National Health Service. His diagnosis of NHS ills centred around the overprescription of drugs, particularly for depression, and the related resignations of General Practitioners (GPs).

GPs are leaving the NHS in droves – England is now more than 3,000 short. He said that being a doctor used to be a high-status profession, but surveys of GPs show that most are planning to retire early in the next few years, and nobody wants to replace them. Part of the reason is that up to half their case load is now depression and addiction for which they can only prescribe drugs (such as antidepressants) which do not even claim to heal or cure and have harmful side effects.

GPs now write over 65 million antidepressant prescriptions a year for 6.5 million patients – one in ten of the population – which is ten times the number being successfully treated with talking therapies. Each year half a million more patients are being prescribed antidepressants. This adds to the epidemic of depression and leads patients to keep coming back, overwhelming surgeries and A&E departments.

This form of treatment goes against NICE guidelines, and recent evidence shows that most antidepressants do not work, with only Prozac being marginally better than placebo. A Public Health study in 2008 found that the British nation was healthiest in 1944, when mental disorders were rare – with an incidence of less than 1 in 1,000. Since then, John said, doctors' once honourable profession has been reduced to the soul-destroying job of being pill pushers for drug companies, generally doing more harm than good by getting people addicted.

The Health and Social Care Act 2012 (HSCA) was intended to give GPs power over clinical commissioning, allowing them to commission talking therapies and decommission antidepressants. 66% of the NHS England budget is devolved to Local Authority

Clinical Commissioning Groups (CCGs) and Health and Wellbeing Boards (HWBs).

To decommission drugs, John said, doctors on the CCGs need the support of elected local politicians on the HWBs to take on the vested interests of the status quo such as drug companies. This political support has not been forthcoming, which may be why so many doctors are voting with their feet.

Before 2012, various health authorities were nominally responsible for getting the best value from this 66% of the health budget – currently £80bn a year – but now, he said, local councils are not even acknowledging in their budgets that they receive this money.

The good news is that the solution is already available, if doctors and local councillors would work together. CCG policy could then be changed from "medication to meditation", allowing GPs to commission drug-free talking therapies for depression and addiction, such as the NICE recommended Mindfulness Based Cognitive Therapy (MBCT). Not only would this empower GPs to heal themselves and their profession – stemming the mass exodus – but it would also help restore the mental health of their patients to its 1944 level, ten years before antidepressants were invented.

Peter Scarisbrick

The final presentation on Saturday afternoon was given by Peter Scarisbrick, who put forward his personal hypothesis about the nature of physical reality. Drawing on a variety of scientific and philosophical ideas, he suggested that reality consists of cells built from units of quantum process, forming an aware physical universe.

Bringing together Whitehead's concept of process, Koestler's holons, and the quantum field idea, he proposed that the universe does not consist of particles and space, but is formed from a process he calls quantum stretch. This dynamic quantum process forms cells, with the limit of the oscillating stretch forming the boundary.

The process cells combine into holons which build up into the structure of the physical universe. He claimed that the quantum stretch process accounts for mass and electric charge, and explains the nature of light without wave-particle duality. It also explains, he said, how gravity and the apparent expansion of the Universe are linked. The process cell idea describes a Universe that is infinite in both time and space. It recycles itself without beginning or end.

In his hypothesis every quantum stretch has intrinsic awareness, which arises from the reactivity of the process cell at its boundary of expansion. So every level of holon has a corresponding level of awareness. Atom-level holons have very primitive awareness limited to knowing their location. When holons reach the level of complexity of, say, an amoeba they have enough combined awareness to be classed as living. Higher-level holons form plants and animals. Human-level holons give us memory and a level of self-awareness that we recognise as human consciousness. Human society is an even higher level holon. In the limit, a holon of infinite size has the properties that are attributed to God. The process cell idea also provides an explanation for extra-sensory perception and the nature of spirituality.

Peter has developed a mathematical description of his ideas, which he has set out in his book *There is No Such Thing as Nothing*. In summary, he said, his hypothesis offers a radically different view of the universe and our place in it.

Entertainment

On Saturday evening the attendees created their own entertainment in good Victorian fashion. The highlight was a stand-up comedy routine by Janine Edge, who took as her theme the set of character virtues extolled by Tom Lombardo in his talk as being essential for "flourishing in the flow" of evolution. She reviewed them one by one to determine whether or not it would be virtuous to drink a glass of gin and tonic she placed temptingly in front of her. The gin and tonic gained approval by a whisker, and possibly just a little wishful thinking!

The AGM

On Sunday, the gathering continued with the formal Annual General Meeting of the Scientific and Medical Network.

Members Forum

Following the AGM, there was a Members' Forum in which participants reviewed and discussed the vision statement of the Network in relation to its various audiences or constituencies. Each of these "market segments" would potentially require a different marketing message, to be reached by different communication channels. In addition to the existing channels used by the Network, the use of social media such as Medium.com and experiential retreats were suggested. Finally, it was proposed that the vision statement (or statements) should perhaps be redrafted by a smaller number of people to keep the message tightly focused and appealing.

The Scientific and Medical Network Annual Gathering concluded after lunch on Sunday.

Hardin Tibbs *is a professional consultant who helps client organizations gain strategic insight into the future. His projects are wide ranging, including 'the future of': hybrid car technology for Nissan, software production for CSC, online education for the Open University, and cyberpower for the UK government. He lives in Cambridge, UK.*

Memories of Henryk Skolimowski

Peter Reason

In the mid 1980s, as part of my research to articulate a participatory worldview, which I was developing as a philosophical support for the practice of participatory action research, I came across a paper from a Polish philosopher whose name was at the time unfamiliar: The Interactive Mind in the Participatory Universe.[1] *It was a paper I pored over many times, for it was one of the first clear articulations of a philosophy of participation I had come across.*

What fascinated me most was the argument that just as we in the West are trained through normal socialisation, and even more through scientific education, to develop an objective mind, so too we could be trained to develop a participatory mind.

As well as setting out his philosophical arguments, Henryk wrote how he had shared his ideas with a theatre director who surprised him by asking, 'What kind of exercises will your use?', leading Henryk to realise that training the participatory mind would need participatory exercises. I was very excited about this, and was able to invited Henryk to hold a seminar at the University of Bath. As I wrote in my book Spindrift:

Among the influences on my group of colleagues at the University of Bath was the Polish philosopher Henryk Skolimowski, who was developing the idea of the 'participatory mind'. We invited him to a seminar with our graduate students. Before he arrived he sent an unusual stipulation: that the room we worked in should be one from which we could have access to rocks, trees, water. This was strange, even to me. In the abstract world of university seminars, participation was still what one did with other people. It had nothing to do with the natural world.

Henryk wanted us to develop a sense of deep participation with the natural world. He invited us to go out into the University grounds and identify something with which we wished to engage: a tree or a rock, a natural pool or stream of water, a leaf or a flower. He asked us to calm our minds by sitting quietly, and then to ask permission to engage with our chosen thing; to meditate on its form and presence; to relive its past and its present in our imaginations. He asked us to explore what forms of dialogue were possible. And whether we could find a feeling of identification. At the end he instructed us to disengage, giving thanks for whatever we had received.

To a Northern European it might seem more than a little eccentric, to be invited to talk to trees (the Prince of Wales has never lived it down). But this sense of being part of a living world is deeply rooted in other cultures. My colleague Donna Ladkin wrote about the walks in the woods near Washington she took as a child with her Grandfather, a man of Black and Native American ancestry who she called Pepere. On these walks Pepere taught her to talk with trees; not only talk, but to listen to them as well. He would tell her to walk quietly, and say, "See if you can hear the trees talkin' to one another."[2]

This participatory exercise was one that I have used many times with students, most recently with doctoral students on the transformative studies programme at California Institute for Integral Studies. It was set out clearly a few years later in Chapter Five of Henryk's book The Participatory Mind.[3]

I was fortunate that my association with Henryk did not stop with one encounter. He generously agreed to examine my student Angela Brew's doctoral thesis (Angela is now, I believe, Professorial Fellow Emerita in the Learning and Teaching Centre at Macquarrie University, Australia). Later, through his recommendation, David Skrbina registered for a PhD under my supervision in collaboration

with Henryk and the late Brian Goodwin. David went on to be one of the leading authorities on panpsychic philosophy and recently published on the metaphysics of technology.[4]

It is so encouraging to see how these early intuitions and tentative teachings toward a participatory worldview have blossomed in many different ways. It is now far more common for people to remark, in the context of climate change and the ecological catastrophe, that humans are, after all, part of the world: Bruno Latour, for example, speaks of humans as Earthbound creatures.[5] Researchers in Britain have conducted participatory research with the more than human world, and not only that, have received formal funding for it and published their findings. [6] The panpsychic worldview, which I see as close to and extending the ideas of participation, has been articulated by writers such as Freya Mathews and David Skrbina[7], and is slowly seeping into general consciousness. Others, such as the German biologist and philosopher Andreas Weber articulate and erotic ecology in which matter and life express their mutual attraction through poetic expression.[8]

These different expressions of a participatory worldview may not derive directly from Henryk's original work; and his own later work took a rather different direction, focused on the metaphysics of light as a unifying cosmic principle. But his place as one of the founding figures of a worldview that moves humanity into a new sense of being part of a co-created whole is indisputable.

1 Skolimowski, Henryk. "The Interactive Mind in the Participatory Universe." *The World and I* February 1986 (1986): 453-70.

2 Reason, Peter. *Spindrift: A Wilderness Pilgrimage at Sea*. Bristol: Jessica Kingsley Publishers (originally published by Vala Publishing Cooperative), 2014, p.71;
Ladkin, Donna. "Talking with Trees: Remembering the Language of Home." *ReVision* 23, no. 4 (2001): 40-43.

3 Skolimowski, Henryk. *The Participatory Mind*. London: Arkana, 1994.

4 http://www.3ammagazine.com/3am/metaphysics-technology-panpsychism/

5 Latour, Bruno. *Facing Gaia: Eight Lectures on the New Climatic Regime*. Translated by Catherine Porter. London: Polity Press, 2017.

6 Bastian, Michelle, Owain Jones, Emma Roe, and Michael Buser, eds. *Participatory Research in More-Than-Human Worlds* London: Routledge, 2016.

7 Mathews, Freya. For Love of Matter: A Contemporary Panpsychism. Albany, NY: SUNY Press, 2003. Skrbina, David. *Panpsychism in the West*. Cambridge, Mass: MIT Press, 2005.

8 Weber, Andreas. *Matter and Desire: An Erotic Ecology*. Translated by Rory Bradley. White River Junction, VT: Chelsea Green Publishing, 2017. Reviewed at http://www.peterreason.eu/Reviews/Matter%20&%20Desire%20Review.pdf

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 and orders for books, services etc.
- book early for conferences - it helps you get a place
- 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 remember to gift aid when you make a payment (subscription, conference fees, etc..) - it maximises funds available for more important things.

Office hours are 10.00am to 5.00pm Monday - Thursday. Please leave a message if no one is available to take your call. We will get back to you as soon as we can.

Network News

NETWORK BOOK PRIZE

There was a very strong field of books this year, stronger than for many years, so it was a difficult decision to award the 2018 Network Book Prize to Emilios Bouratinos for his book *Science, Objectivity and Consciousness*, reviewed in this issue. In old prize parlance, five books come into the very highly commended or '*prox acc*' category (listed alphabetically): *The Visionary Spirit,* by Mick Collins, reviewed in this issue, *Real Magic,* by Dean Radin, reviewed in this issue, *Paths between Head and Heart,* by Oliver Robinson, reviewed in the previous issue, *Science and Spiritual Practices,* by Rupert Sheldrake, reviewed in the April issue and finally *Spiritual Science,* by Steve Taylor, also reviewed in this issue.

MEMBERS' NEWS
HONORARY MEMBER, DR MARY MIDGLEY (1919-2018): THE OWL OF MINERVA

John Clarke writes: The sad news of the death of Mary Midgley led me back to her autobiography *The Owl of Minerva*, a title taken from a famous quotation of Hegel who held that wisdom comes with the experience of time and age. Her own philosophical oeuvre emerged in mid-life with the publication of *Beast and Man*, followed by a wealth of writing, broadcasting, and public lectures. This book, which challenged the simplistic binary division between human and natural worlds, led to her enthusiasm for environmental issues, to support for the Gaia hypothesis, and to a passion for "reviving our reverence for the earth"; it was "the trunk out of which my various later ideas have branched".

This was followed with brilliant analyses of a whole range of the major myths of our age, many of them central SMN concerns. These myths, elaborated in *The Myths We Live By,* display various forms of reductionism, for example extreme kinds of individualism in politics and sociology as well as in Existentialism. Concerning science in general she wrote with great insight into the ideologies and myths that can lurk within it, including the reduction of mind and life to machinery, and the dangers of scientism which turns science into an exclusive and dehumanised worldview. While an admirer of Darwin, she vigorously disputed some of his reductionist acolytes such as Richard Dawkins and the sociobiologist E.O. Wilson. Though for some years a lecturer in philosophy at Newcastle, her writings avoided the abstractions of logic and philosophical analysis, but eloquently addressed a plural readership and a plural world with open-minded passion and wisdom.

DEATH OF NEIL MAY MBE

Neil May, whose article on health and wholeness appeared in the last issue, died during an operation last month. He was a senior research fellow at the UCL Institute for Environmental Design and Engineering, and a fulsome tribute appears on the UCL website. This gives a good account of the amazing scope of Neil's activities focused around better buildings, 'not just better functionally or architecturally but also socially, culturally, ecologically and philosophically.' The tribute quotes Neil himself as saying:

What are buildings for? And that leads to the question: what are human beings for? What is our purpose? We need to think deeply about that if we are to create a future that is sustainable as well as meaningful. Buildings are manifestations of the values of our society and if we want to have more beautiful, sustainable and creative buildings then we have to address our core values first.

The following paragraph gives a good account of the scope of his work:

In 2005, Neil brought together a group of natural building developers to campaign against the poor standard of performance of new homes in the UK. This was the start of a long collaboration with the Sustainable Development Foundation, which resulted in the creation of the Good Homes Alliance, the Passivhaus Trust, the Alliance for Sustainable Building Products and the Sustainable Traditional Buildings Alliance, each of which campaigned to change practice relating to performance problems that Neil had identified. Neil was instrumental in establishing and nurturing all these organisations, before moving on to sort out the next problem on his list! As a colleague remarked "Neil had the wonderful gift of bringing people together into communities of interest, creating what at first seemed to be niche groups but ended up becoming hugely influential for change at a national level."

JOE ST CLAIR - WSDF-UK

In October 2017 **Joe St Clair** was appointed **UK Director** of the **"World Sustainability Development Forum"** with responsibility for setting up the first office of the WSDF in the United Kingdom (**WSDF-UK**) Joe is now working closely with the WSDF HQ in Washington DC and the Global President of the WSDF (former Chairman of the IPCC) **Dr. Rajendra Pachauri.** The prime objectives of the WSDF-UK, working in close association with other global WSDF offices, is to raise public awareness of the key world threatening issues identified by the 17 **Sustainable Development Goals** (SDG's) and the carbon emission targets defined by the **'Paris Agreement'** and to work with the **UK Government** to ensure all agreed targets are met by **2030.**

For more information, contact Joe St Clair, WSDF-UK Director – joe@worldsdf.co.uk

LONDON GROUP REPORT

LONDON GROUP CLAUDIA NIELSEN – 0207 431 1177, claudia@cnielsen.eu
To read reports from other meetings, go to the REPORTS page of the London Group page of the Network's website. If you don't live in London but wish to be advised of London events, please drop me an email and I shall add your e-address to the circulation list.

AUGUST

Our August meeting slipped into the last days in July because our speaker **DR SIMON DUAN** had to travel during August. Simon came to the UK from China in the 1980s to study and was awarded a PhD in Materials Sciences by Cambridge University. He has worked for many years in research and development, technology commercialisations and management consultancy both in China and the UK. He has a longstanding interest in parapsychology and is currently Vice President of the Chinese Parapsychology Association. In addition, he is the founder of Metacomputics Labs which researches a new theoretical framework that unifies consciousness, mind and matter. This research was the topic of this evening's presentation, which he entitled ***Digital Consciousness and Platonic Computation- Unification of Consciousness, Mind and Matter by Metacomputics.*** Simon began his study of consciousness following a psychic experience in China, when a damaged wisdom tooth was released from the jaw by a simple slap from an unconventional practitioner. Other extraordinary phenomena followed. As a scientist he is intrigued by what cannot be explained using physics so, he told us, he gave up physics. In explaining his model he uses the computer as metaphor, acknowledging that humanity has historically used the technology of the moment to understand the world around it. The model is to be understood as a map, not the territory. It identifies Ultimate Consciousness as being empty of properties, timeless, nondual, dimensionless, formless, infinite, boundless etc. and can only be described by what it is not, rather than by what it is, an idea familiar to mystical religions. It is potentiality.

Simon uses the terminology of pixels which helps make the concept graphic. Ultimate consciousness is a grey pixel. As it creates duality, it creates a white pixel and a grey pixel, a mirror in which consciousness can see itself. The second step, the first computation, creates trinity, in computer terms data, the processor and the program. Step three creates diversity represented in 3D. Individual consciousness (as in pantheistic principles) is part of ultimate consciousness, and consciousness is the hardware in which the software of reality operates. For further information, see http://www.metacomputics.com. Time in this model is a progression of the pixels as they become created. The present moment is when the computation occurs and space is the 3D display of the computation.

This model allows for the idea of multiverses, as each time Ultimate Consciousness creates a duality, a new universe is formed. Many levels of reality can also be formed in this model and psychic phenomena occur when mind enters a different level of reality. The computation in this model is done at the level of a platonic computer and reality is a projection on a 3D screen. The phenomenon of entanglement is therefore explained by the participation in the same 3D screen of the elements entangled, whether two particles, the coordinated flock of birds or school of fish. Simon's speculation is that we may be living in a computer simulation, an idea which has been expressed by scientists in the past and more recently suggested in the film *The Matrix*. The model leaves a few questions unanswered, such as what of free will, where/when does the "programmer" emerge in the process, and Simon has promised to come back to explore these questions at a future occasion.

SEPTEMBER

This month we welcomed **DR. OLIVER ROBINSON,** principal lecturer in Psychology at the University of Greenwich, who describes himself as an amateur philosopher and a committed spiritual explorer. He is also the author of various books, including his latest, *Paths Between Head and Heart*. This evening he explained one aspect of his book, the **Typology of Spiritual Feelings,** the title of his talk. Olly started by telling us about one of the differences between the approaches of science and spirituality, science resting on the cultivation of a particular kind of thinking, analytical, deductive, critical etc and spirituality emphasising feelings. This difference is also reflected in the different kind of trainings, scientific and spiritual which relies on practice. The feelings experienced in spiritual practice facilitate a deep knowing which is epistemic in nature and also moral. It cultivates virtue.

This evening Olly developed four types of feelings associated with spiritual experiences: positive, ecstatic, aesthetic, and sublime. Positivity is what he called, a spiritual playground, and is developed through mindfulness, breath work, generally practices that induce a positive state of mind and joyful living. Laughter is a manifestation of positive feelings and

we were asked to talk in gibberish to one another in order to experience laughter. Ecstatic feelings are those beyond the range of normal emotions and are often associated with trance phenomena, such as shamanic experiences, orgasms, dance, music etc. They are infrequent and sometimes engender a depressive mood after. Aesthetic feelings are associated with the sense of the beautiful, nature, visual arts, music etc, and Olly pointed out that the opposite of aesthetic is anaesthetic, which colloquially relates to loss of consciousness. And the last on, the sublime is a deeply paradoxical state, a mixture of pleasure, pain and fear, the concept of awe encapsulating the phenomena. It shatters the ego and moves us close to the mystery which is life. It is experienced sometime in nature, in powerful natural phenomena, at times in childbirth and other such unique experiences. He mentioned the work of Rudolph Otto who coined the word numinous and encapsulated the sublime with the word Mysterium Tremendum.

OCTOBER

PROF FARANEH VARGA-KHADEM was our speaker this month. She is Prof of Developmental Cognitive Neuroscience and Head of Section on Cognitive Neuroscience and Neuropsychiatry at the UCL Institute of Child Health. She is also the clinical-academic lead for the Department of Clinical Neuropsychology at Great Ormond Street Hospital for Children. She conducts research on the effects of brain injury on neural circuits serving memory and learning, speech and language, special navigation and movement organisation. She is also a member of the Baha'i faith and this evening she gave us an overview of her work and Baha'i spiritual principles and how they inform each other.

Faraneh started by explaining what she felt when her daughter started to speak at around age 2, it felt like magic! She became motivated to understand how the brain allows this to happen and went on to study the brain. Her studies led to the understanding that memory and language go together in the mind and are a particularly human attribute. Her research with amnesiac children who have impaired memory due to oxygen deprivation in the brain as a result of birthing difficulties, illness or injury, show that although these children can learn to speak, read and write, they have no memory which means they live exclusively in the present. They cannot remember the past or plan for the future. They listen but cannot remember. They also cannot use their imagination.

Another set of children Faraneh researches are those who have no language. She told us about a family which presented some 25 years ago with difficulties in speaking. Studying this extended family, she found that within three generations of this family some could speak normally and others could not, due to physical difficulties in jaw articulation. Her research identified a gene mutation as responsible for this condition. So based on these two sets of patients, no memory and no language and the science behind these conditions, Faraneh went on to explore **What Makes Us Humans** – the title of the presentation. What is it that energises the brain to do the job of being human? Is it something we don't see, science cannot physically find in the brain, such as memory or muscles that move the jaws? Mind, memory and language are the elements that in particular, differentiate us from animals.

Even without language, as per some of her research subjects, or without memory, those children are still human, because they have whatever it is that energises the human brain to do the job of being human. Faraneh went on to give us an interesting overview of evolution through various stages and transitions and noted that at one point in the process, a particular gene became inactive in order to allow the jaw to recede and the skull to grow to accommodate a larger brain, which came to include the all important frontal lobes. The jaw became able to articulate sounds which then developed into language. Our hand also evolved to allow the thumb and forefinger to touch, which our ape ancestors could not do.

Archaeology shows that around 25,000 years ago burials became elaborate affairs and included artefacts designed to help the individual in the afterlife. Discoveries don't tell us how metaphysical experiences came about but they indicate that they did. The belief in an afterlife indicates that those beings felt a connection with the transcendental, which is, as far as we know, specifically human. Faraneh then read from some beautiful Baha'i texts, addressing the harmony between science and religion. Science is important but if it stops the interface with spirit, it will not serve humanity. The brain is regarded as the oxygen of the infinite, as a facilitator, not the originator of consciousness.

NOVEMBER

Senior scientist at the Artificial Intelligence Research Institute of the Spanish National Research Council (CSIC) **DR. MARCO SCHORLEMMER** was our speaker this month. Marco has a broad interest in Computational Concepts Systems, i.e. modelling those systems of conceptual entities that we continuously create and adapt to apprehend and describe the world we live in and interact with. The talk was entitled **Science Technology and Contemplative Inquiry** and he addressed the discrepancy which currently exists between the core values of scientific enquiry and practice.

Marco started by pointing out the principles of scientific inquiry as being:

- **Vocational**, permeated by an attitude of **awe** and **wonder** relying on open communication, sharing and trust.
- It creates **community**
- It cannot be rushed into, it is **gratuitous** and **loving**
- It is **transformational**, freeing our experience from mythical understandings of reality
- Encourages **humility**

That is a contemplative attitude. However, the reality of scientific practice today is very different. It:

- Explores **fashionable research lines** with short-term objectives and pragmatic applications.
- The teams are **opportunistic** to attract funding, they are **competitive**, wary of sharing ideas, set into rigid power hierarchies
- There are constant interruptions, ideas are often **half-baked** but must get published or the research perishes.

- Research is supported by big business leading to **power** and **enhancement of egos**, wary of challenging orthodox theories as it may affect credibility and scientific careers.
- And there is a certain **arrogance** behind the objectivity, evidence, proof, rationality, ...

These are the values of the social economic model which arose from Modernity. The overarching aim of investors in scientific research is to increase productivity and that of the scientists themselves is to sell their work. In Marco's own field of Artificial Intelligence, this paradigm may bring with it certain dangers. He explained AI as an endeavour which aims to design autonomous systems that will produce best outcomes based on "memories" of what he called "vicarious perceptions" the system has of an environment. So, in the light of its "memories" of past recorded "perceptions", an AI system will produce autonomously, the best possible outcome in response to the demands of a current environment.

The danger however is that we forget that we are using metaphors and endow the models with an ontological reality leading to an over reliance on the system. An example is the algorithmic trading which can potentially tip markets into free fall. Marco says that rather than idolising productivity, technology should be measured against its ability to enable us to devote time to creative freedom, the freedom of creation. Scientific inquiry is naturally dualistic yet considering the non-dual nature of the ultimate nature of reality, true science should be able to help us transcend our attachment to duality if conducted according to its true principles. To this effect, finding himself in the mid of his scientific career, Marco seeks out other scientists and organisations which share his motivations. He mentioned a few which included the SMN in the UK, The Slow Science Academy in Germany, the Association of Contemplative Minds in Higher Education in the US, L'Atelier des Chercheurs in Belgium and the World Community of Christian Meditation in the UK.

NEWS AND NOTICES

WORLD WIDE WAVE OF WISDOM • WWW.WWWOW.NET

A wave is a phenomenon of nature, driven by the wind and deep undercurrents, powerful hidden forces. *The World Wide Wave of Wisdom* is similar. While its origins remain unseen, its valuable influence can readily be detected by those attuned to it.

Wisdom is universal but hard to define. It guides us on how to be and behave for the best for all concerned in any given situation.

Find out more from this new website about Wisdom, and about joining the Wave. Learn *why* this is important, and *how to* maximise your contribution towards a cleaner, safer, happier world.

Three enthusiastic people, not young but still lively, met recently to ask *'How might we continue contributing to a better world for our loved ones and future generations?'* Our gift of this website is the first result of that meeting.

The *World Wide Wave of Wisdom* is intended as a natural movement, rather than a campaign. We are not setting up a new organisation. In a sense, such a wave has existed for millennia, since the birth of *Homo sapiens*, always conjuring up its own energy and momentum. Arguably, though, this wave has declined in force in recent times. We would like to see it massively re-invigorated, and are therefore recommending it to people as a movement to join in, augment and share widely.

Please take a look.

SOME IDEAS DESERVE TO BE BOOKS. . .

Zoe King writes: Founded in 1919 by Audrey Heath and May Drake, two women who challenged the conventions of publishing, we are a London literary agency still very much driven by a passion to help writers who want to shift, shape or enrich the wider cultural conversation, and provide irresistible entertainment. Championing our clients' writing remains at the heart of what we do. As well as a century of experience, we bring energy and ambition, and a close focus on the details of our work. I work exclusively with non-fiction authors and I am always looking out for original ideas combined with great quality writing. If you are looking for representation please visit our submissions page at www.amheath.com or contact me directly at zoe.king@amheath.com

MEMBERS' ARTICLES AND ARTICLES OF INTEREST

Available through the editor or through links – dl@scimednet.org

GALILEO COMMISSION

Steve Taylor

- *Beyond Belief: When Science Becomes a Religion (A response to Lane and Visser, see full discussion on www.integral.net) 12 pp.*

Pim van Lommel

- *Beyond the Brain 2018 presentation – a comprehensive and powerful statement (19 pp.)*

Larry Dossey

- *The One Mind – 14 pp, from Tikkun*

John Kapp

- *The Brain is a Filter for Consciousness – 7 pp.*

SCIENCE

Fritjof Capra

- *The Web of Life – Schroedinger Lecture, 1997 – 9 pp.*

Alan Rayner

- *Natural Inclusion: Nature's Perception of Nature – 7 pp.*

Jeremy Lent

- *We Need an Ecological Civilization Before It's Too Late – 17 pp with links.*

Timothy Newman

- *Water is a Molecular Liquid – 2 pp., from Physical Biology 2014*

Timothy Newman

- *Biology is Simple – 5 pp., from Physical Biology 2015*

MEDICINE/HEALTH

Gary Greenberg

- *What if the Placebo Response is not a Trick? (14 pp.)*

Paul Kieniewicz

- *5G – A Dangerous Health Experiment – 2 pp. also on the website. Additional material (3 pp.) from Ingrid Dickenson.*

CONSCIOUSNESS STUDIES

Mark Fox

- *A Tricky Threshold and a New Paradigm: Where Next for Near-Death Studies? (14 pp. from the Christian Parapsychologist). An interesting take bringing in the Trickster figure.*

Multi-author study on NDEs and DMT (my copy has no author names) – 35 pp.

Graeme Vivers

- *Searching for Consciousness – using Reason and Logic – 15 pp.*

GENERAL

Ursula King

- *Love – A Higher Form of Human Energy in the Work of Teilhard de Chardin and Sorokin (27 pp., from Zygon 39/1, 2004)*

Oliver Robinson et al

- *Age and Cultural Gender Equality as Moderators of the Gender Difference in the Importance of Religion and Spirituality: Comparing the United Kingdom, France, and Germany – 8 pp., from the Journal for the Scientific Study of Religion. This articles derives from the SMN Survey conducted by Ipsos MORI – see article from April 2017.*

Jonathan Glaisman

- *The Devout Sceptic: a creed for those of little faith – 6 pp.*

Nicholas Hagger

- *Global Unity through a World State and a World Constitution – 2 pp.*

ONLINE ARTICLES FROM *ANTHONY JUDGE*

- *Systematic Humanitarian Blackmail via Aquarius?*

  Confronting Europe with a Humanitarian Trojan Horse

  www.laetusinpraesens.org/docs10s/blackhum.php

- *Time for Provocative Mnemonic Aids to Systemic Connectivity?*

  Possibilities of reconciling the "headless hearts" to the "heartless heads"

  www.laetusinpraesens.org/docs10s/blackhux.php

- *Prohibition of Reference to Overpopulation of the Planet*

  Draft Proposal for an International Convention

  www.laetusinpraesens.org/musings/opopcon.php

- *Post-Apocalyptic Renaissance of Global Civilization*

  Engaging with Otherness Otherwise? www.laetusinpraesens.org/musings/commrena.php

- *Global Compact Enabling Complicity in the Ultimate Crime against Humanity*

  Institutionalizing global myopia in anticipation of excessive population growth

  www.laetusinpraesens.org/docs10s/unmigrat.php

book reviews

Books in this section can be purchased via the Network web site (www.scimednet.org) from Amazon.co.uk and the Network will receive a 10% commission. In addition, the Network receives a 5% commission on all sales if you log on through our web site!

SCIENCE-PHILOSOPHY OF SCIENCE

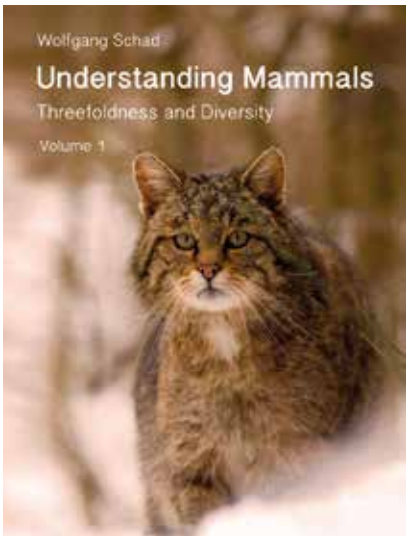
IMPERFECT STEPS TOWARDS EVOLUTIONARY PERFECTION

Martin Lockley

UNDERSTANDING MAMMALS: THREEFOLDESS AND DIVERSITY

Wolfgang Schad

Adonis Press 1,320 pp., (2 vols), $125, h/b - ISBN 978-0-932776-63-1



When I read Wolfgang Schad's book, *Man and Mammals: Toward a Biology of Form* (Waldorf Press, 1977), some 20 years ago, I had a threefold reaction. First, "why doesn't everyone teach biology this way?" second, the book sheds sharp light on incongruities in conventional biological wisdom, realigning them to show us nature's inherent organic coherence, wisdom and order, and third, I must meet this man. So, I went to his doorstep. Anyone with even a modest inclination towards holistic thinking, and a basic grasp of biology, will likely experience a similar intuitive sense of organic wisdom and wholeness in reading *Understanding Mammals,* a wide-ranging, much-extended revision of *Man and Mammals,* with an appropriately updated title.

To call it a *tour de force* is perhaps glib hyperbole; rather, let's say Schad has shown us, again, how deeply he understands mammal organisation, and the implications such organic appreciation has for our place in the mammalian world. Not only does he show us how we as individual humans, like all mammals and other species, are "made up" or "function as" a highly integrated, threefold "organisation" of organ systems (explained below), but he also shows how this organisation is evolutionary and deeply woven into the very fabric of nature, in every individual family, order, class and ecosystem. Schad warmly engages us in practically every aspect of mammalian biology, from sensory perception to respiration, digestion, reproduction, embryology, locomotion, coloration, physiology, life span, evolution, behaviour and psychology. His insights into the history, philosophy, strengths and weaknesses of evolutionary biology are both masterful and revolutionary in scope and simplicity. They reflect a biological genius honed by a lifetime of loving and dedicated nature observation, and an emancipated scientific outlook free of preconceptions, dogma and convention.

Threefoldness needs introduction for those unfamiliar with Goethean-Anthroposophical traditions in biology. No organism can exist without both open and closed attributes (functioning): open for the intake of sensory information, air and food, but closed enough to ward off infections, and the myriad impacts, "slings and arrows" posed by the environment and other organisms. We, like all mammals, use our more-open "sense-nerve" pole, centred around our nervous system, to remain alert to the airy, long-range world of light, sound, smell, etc., and cannot disengage from sensory input while awake. The opposite, more-closed pole is the digestive-limb (or metabolic-limb) system, which is emancipated from the environment insofar as it ingests (transforms, in darkness) the food it takes in, and literally pushes back, as limbs do, in immediate short range contact, against the physical environment. [We digest while limbs thrash and even sleepwalk in the dark of night].

A plant analogy of this polarity would be the difference between

the light, airy, photosynthetic, transpiring leaves, swaying in the breeze, while the roots, like powerful limbs, heave in the soil, disintegrating minerals, physically breaking and ingesting the very bedrock. Between this twofold polarity, the middle respiratory-circulatory system, in mammals, and vertebrates generally, provides the third and mediating component. Neither open or closed, it is in a constant rhythmic cycle between inhalation and exhalation, and opening and closing of heart valves. [Like the mammal, even the tree has a trunk, which mediates the rhythmic in-out circulation of xylem and phloem].

This threefoldness is far more than a cataloging of organ functions. To recognise the middle system at the literal "heart" of the threefold organism is to see dynamic organic wholeness "as it really is," simultaneously the same, and with subtle variation, in every one of us, and in shades of kind and degree in all our mammal cousins. As Schad writes "The relational organism illustrates one of the first principles of life, namely that the whole is present, albeit in a modified way, in each of the parts." [A holographic principle]. Since its inception, modern biology has talked about order, organisms and organisation without fully understanding its own quest for a conceptual coherence, or "order," which remains unsatisfied and incomplete until the threefold reality of organic dynamism is "seen" and appreciated, as the beating heart of nature.

Just as fish are unaware of the watery reality in which they swim, so, thus far, biology, for all its fine achievements, has failed to appreciate fully the "structure" and "dynamism" of the organic reality of which we, its component biologist-observers, are both an essential "part" and, at the same time, a coherent representation of the whole, "natural" organisation. [The very human quest to "know ourselves" is more than psychological curiosity. As every discipline from Darwinism to genetics informs us, it is a manifestation of and inherent search for meaningful understanding of what we intuit–that organic nature is a dynamic coherent whole, and we an integral part]. Whether turning to science, spirituality or Anthroposophy (a happy blend of both), we prove our own, and nature's, wisdom in the dynamic quest to bring our encounters with the outer world into a satisfying harmony with what constitutes our emotional, intellectual and spiritual inner being. This can only happen through achieving dynamic resonance and equilibrium, at all levels of organisation. This is what Schad and Anthroposophical Science have to offer.

Examples inform better than words. Consider the parallels between 400 million years of vertebrate evolution (phylogeny) and the development of each human (mammal) individual (ontogeny). Vertebrates, as fish, first internalised (emancipated) the brain (central nervous system CNS), then amphibians internalised the lungs, next reptiles, including some dinosaurs and close bird relatives, internalised the thermoregulatory circulatory system. Mammals internalised the reproductive systems and humans freed their limbs (especially hands) from the environment. (In contrast "the ape's limbs…come under the influence of their arboreal environment"). The long-term head-to-toe developmental wave recapitulates, in short order, in our own individual development.

The anterior CNS (head) is disproportionally much enlarged through fetal development and early infancy, meaning it has matured (accelerated development) relatively early (analogous to the early start it got in evolution). The infant first lifts the head at 3 months, sits up at 6 months and stands between 9 and 12 months. Maturation of the limbs and reproductive system follow later in the last of three seven-year (1-7-14-21) cycles, also expressed in digestion- and limb-related tooth development. Thus, development of posterior organs is held back, rendering each individual a 3-fold blend of organs that have mostly completed early, accelerated development, developed on an intermediate schedule, and those that have held back (retarded) development until later. Differences in the degree to which these organ systems develop is pronounced in different species, families and orders, but more subtle in individuals of the same species. But, in all cases, they correspond to differences in anatomy, physiology, behavior and other attributes.

Rodents, for example, are small and dominated by their relatively over developed nervous systems, whereas ungulates are large and dominated by powerful limbs and elaborate digestive systems. The carnivores mediate between these poles and actually regulate rodent and ungulate populations. But within each group, these polarities and associated 3-foldness reiterate in a recognisable orderly way. So there are large digestive rodents (beavers) and small, skittish ungulates (contrast small gazelles with buffalo). Psychologically, the nervous rodent is over-reactive to the environment (un-emancipated, and too objective) while the large ungulate is placid and ruminative (subjective and emancipated from its surroundings).

Such psychological diversity is more subtly manifest in human constitutional types, and ethnic groups, but due to our unique self-awareness we recognise much greater nuanced and subtle human differences than we might in regarding all lions, tigers, or pandas as essentially very similar. In the human species the balance between aforementioned polar, animal extremes led Goethe to describe the "extraordinary perfection" of the human organism achieved through "developmental restraint," that is, being unspecialised.

Schad recognises that each species organs and whole body "represents the *completion* of a stage in the evolutionary process," not an "incomplete" transitional stage in development between an ancestral and future species, which is implied by the Darwinian "line of descent" paradigm. You cannot "propagate a pear tree from an apple tree." Moreover, the discovery of "lateral gene transfer"(coalescence) leads to the conclusion that "*Darwin's principle of divergence has thus been complemented by that of coalescence.*" [His italics]. Others have also rightly pointed out that evolution involves cooperation or symbiosis as well as competition. Schad's holistic conclusions are revolutionary in their "ordered" sequential, dare I say "evolutionarily progressive," implications: "The sequence of …emancipation process[es] reveals a striking principle," the "accelerating tendency [of] the sense and nervous systems led the way; the emancipation of the metabolism…reproductive system, and …limbs came only later … in the higher animals. But only when these systems had gained their autonomy did the …most evolved organism become possible."

Thus "our personal freedom and independence have not evolved recently but have accrued over the whole course of this evolutionary journey" …they have been imperfect steps towards towards an extraordinary perfection.

Such imperfect steps are also how science proceeds. SMN members may lament that mainstream scientific paradigms are imperfect, and ask, as I did, when first reading Schad's work "why don't they teach biology like this" or better? Well, teachers like Schad have dedicated lifetimes to doing a better job. He is both ahead of his time, and an excavator of ancient, insightful and nuanced Goethean and Anthroposophical wisdom. In order to transcend certain deficient and overly reductive modes in science, we may consider his work to represent one of many multiple working paradigms, albeit an extraordinarily holistic one, that a more mature biology will need to adopt, explore further, and refine, as his colleagues have done to various degrees.

Schad inspired me to apply his paradigm to dinosaurs and I was gratified that he appreciated that my results helped him understand dinosaurs 'better.' Our colleague Mark Reigner, who wrote the forward to *Understanding Mammals*, has applied Schadian paradigm thinking to birds, with most fruitful results. We have also coopted other researchers in the field of heterochrony (timing of development) with synergistic results, and in fact "we" colleagues, having convened at a few conferences, are poised to follow *Understanding Mammals* with a broader treatise on vertebrates. We have learned that without Schad as a mentor and guide our scientific quests have led to incomplete and imperfect results. The Schadian paradigm may not be the last word in extraordinary perfection, but it is extraordinary and has what lyrical scientists like to call elegance. Such awareness of elegance speaks to the perennial quest for shaking off imperfections and aspiring to new, more perfect paradigms.

***Professor Martin Lockley** is Emeritus Professor of Paleontology and Consciousness Studies at the University of Denver.*

A HUMANE APPROACH

David Lorimer

SCIENCE AND HUMANITY

Andrew Steane

Oxford, 2018, 289 pp., £25, h/b – ISBN 978-0-19-882458-9

The author of this brilliant and wide-ranging book on science, philosophy and meaning is a professor of physics at Oxford specialising in experimental and theoretical quantum computing. It questions the popular and hegemonic presentation of science as the be-all and end-all of knowledge purporting to give a complete account of the nature of human life and reconfiguring the whole human outlook in mechanistic terms. The first part addresses the structure of science as a network of mutually interacting and informing ideas rather than a bottom-up ladder (p.17) – the author illustrates this with a discussion of symmetry and thermodynamics. He then introduces his embodiment principle whereby 'the lower level and higher level principles are in a reciprocal relationship of mutual consistency in which each illuminates the other' (p. 42). Philosophically, the notions of explanation, insight and understanding represent different discourses and a two-way interaction, rather than postulating a so-called fundamental level on which everything else is built.

The next chapter on logic and knowledge introduces the author's 'Babel Fallacy' - defined as the claim to know the complete truth about the physical nature of anything. For instance, the behaviour of a monkey cannot be understood from its molecular components, hence 'low-level explanations do not do all the explanatory work in science' (p. 57) - nor is an arch explained by its stones. There is an excellent discussion on the difference between cause (owing to what?) and purpose (in order that what?) - Steane shows that these notions are logically unrelated, rightly asserting that goals and ends are associated with thought and intention. He then applies this reasoning to the selfish gene of Richard Dawkins, demonstrating how the gene is misrepresented as having agency and that he is conflating cause and purpose. Moreover, his idea of the human being as a robot blindly programmed to preserve genes does scant justice to the richness of the human person. Steane then develops his own metaphor in the next chapter of the 'eager' rather than the selfish gene and questions the equivalence of impersonal and merciless in describing the process of life.

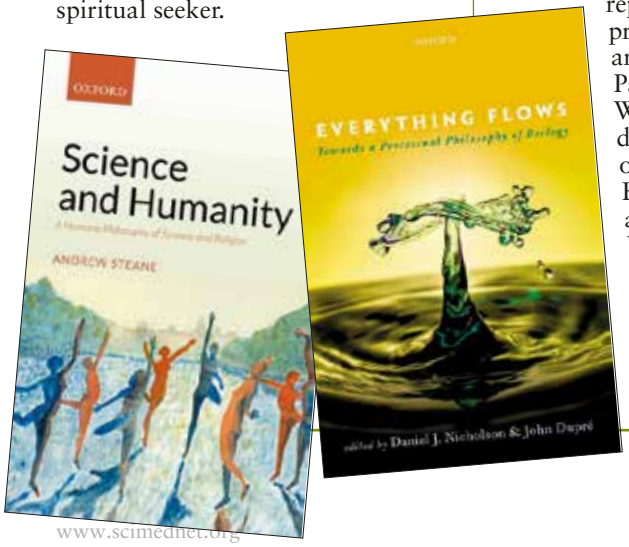
The second part on value and meaning analyses the limits of science and its place in a larger framework of human explanation and understanding: abstract model making cannot answer legitimate questions about value and meaning. A section on the history of science contains an interesting discussion of the Galileo case within this context, followed by an analysis of completeness and cogency, where the author cautions that the putative completeness of the atheist description is not a guarantor of its correctness - however, 'nor is the completeness of any other description' (p. 136). Moving on to values and moral judgement, Steane makes a convincing case that the tools of logic on their own cannot show us what is valuable or good - values must be embraced rather than derived; nor can the existence of 'that which deserves the deepest allegiance of all free agents' be either proved or disproved: faith entails trust in God as foundational reality rather than the somewhat primitive concept set up as a straw man by public atheists. For Steane, the spiritual path is one of discovery and response – at the end of the chapter there is a striking poetic representation of nonviolence as a principle near the heart of all genuine spirituality; and the book itself contains many of the author's poems and even a short story as a different form of articulation.

An important chapter is entitled A Farewell to Hume and deals with an argument put forward by Aquinas to the effect that the natural world may be self-contained and that theistic religious claims are unwarranted and superfluous. The argument is subsequently restated by Richard Dawkins in terms of lack of explanatory power (LEP) where God is represented as a complex thing regarded as improbable or in need of explanation. For Steane, the fallacy is that God does not fall into the class of things, and that a much subtler language and approach is required. Here he presents four witnesses embodying a deeper approach: Jesus himself from the Gospels stating that human beings are in need of forgiveness and

'a fresh ability to live better lives'; then Dietrich Bonhoeffer, the desert fathers and the poet RS Thomas (elsewhere he brings in Mozart and Bach) - all these represent human experience and effort rather than academic talk.

The final chapters draw the threads together by restating that God is not an explanatory scientific hypothesis but rather 'provides the very concept of explanation, an intelligible universe, and the urge to explain' (p. 213) - indeed science itself emerged historically from theology. This leads on to a discussion of whether the universe suggests design, purpose, goodness or concern or is a place of pitiless indifference as proposed by Russell and Dawkins. The impersonal forces of nature do indeed exhibit pitiless indifference, which is their very nature. However, this is not all since humans experience an inwardness and purpose moving towards, in the author's words, a more complete expression of goodness, beauty and truth where the natural world 'is also the vehicle of transformative and transcendent experiences' (p. 235).

In this wider context, science is part of the humane philosophy underpinned by 'faith expressing itself through love' in the practice of both science and religion, a love that transfigures analysis as a fuller expression of our humanity representing both below and above in partnership, responding with trust. For the author, the context is Jesus and his impact on the world, but more generally the idea 'that reality extends beyond the ordinary processes of the natural world' (p. 265), which we as whole persons can grasp as we try to close the gap between the world as it is and as it could be if modelled on trust and reciprocal giving. The journey of reading this profound book brings a deeply humane encounter with a dedicated scientific and spiritual seeker.



FROM SUBSTANCE TO PROCESS

David Lorimer

EVERYTHING FLOWS

Edited by Daniel J. Nicholson and John Dupre

Oxford, 2018, 386 pp., £55, h/b – ISBN 978-0-19-877963-6

This significant volume is one of the main outcomes from a five-year research project funded by the European Research Council on process philosophy of biology. Process philosophy is associated with Alfred North Whitehead and more indirectly with his contemporary Henri Bergson - I read Whitehead's *Process and Reality* in Leipzig in 1983, having previously read his *Science and the Modern World*, a brilliant history of science. In fact, the editors of this book seek to distance themselves from Whitehead, mainly I think for philosophical reasons since Whitehead was a panpsychist and the authors argue for a naturalistic metaphysics, which leads them to remark that they do not want to associate themselves with 'undesirable philosophical baggage' - though it has to be said that everyone has to make basic philosophical assumptions, and that one person's philosophy is another person's baggage.

The volume is a major statement of process biology, covering metaphysics, organisms, development and evolution, and with the final section on implications and applications. Much of this is technical and aimed at biologists and philosophers of biology, but the general reader can gain a great deal from the introductory manifesto – I will concentrate on this, then Daniel Nicolson's essay on mechanism and organism, and finally on an interesting processual perspective on cancer. Going back to the Greeks, the archetypal representatives of process and substance are Heraclitus and Parmenides. Following Whitehead, there developed a school of organicists including Edward Stuart Russell and Joseph Henry Woodger; then, the later stage CH Waddington, who in turn had a great influence on Brian Goodwin, mentioned by Johannes Jaeger in his foreword. Waddington crops up in quite a number of papers. Other influences include the systems theory of Ludwig von Bertalanffy and Paul Weiss.

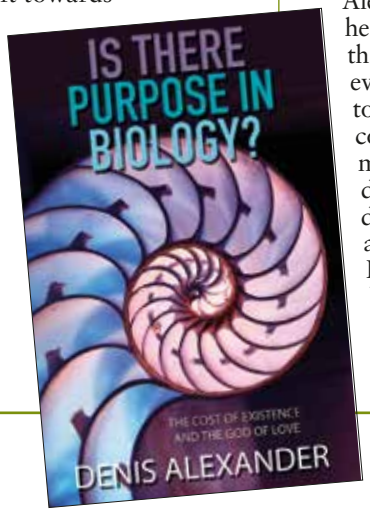
The editors develop the case for a dynamic process approach, also drawing on quantum field theory and ecological interdependence. There are detailed critiques of essentialism, reductionism and mechanicism as natural correlates of substance thought, especially the last with its persistent influence within biology. Interestingly, they point out that the reason why mechanistic explanations provide insights is that 'the components of the mechanisms being described are sufficiently stable on the timescale of the phenomena under investigation' (p. 29). Mechanisms are in fact 'manifestations of specific patterns of stability of different processes unfold concurrently in living systems'. This process and implicitly relational view has implications for physiology, genetics, evolution and medicine. In their conclusion, the editors rightly observed that scientists 'are inevitably committed to certain metaphysical views, regardless of whether they are aware of them or not' (p. 38), as we have also noted in our Galileo Commission Report.

Dan Nicolson writes about re-conceptualising the organism – from complex machine to flowing stream. As far back as 1988, our May Dialogue was entitled 'From Mechanism to Organism' featuring Brian Goodwin and Richard Dawkins, who regards the gene as the basic biological component rather than the organism. One or two contributors take the view that organisms are metaphysically secondary to or abstract manifestations of the processes that constitute and sustain them. Dan goes back to the mechanisation of the Western worldview in the 17th century, noting that the machine metaphor has collapsed in physics but survives in biology as the machine conception of the organism (MCO). He argues that organisms are intrinsically purposive while machines are only extrinsically purposive; also that organisms are necessarily open systems exchanging energy and matter in order to maintain themselves in dynamic stability far from thermodynamic equilibrium, while machines exist in equilibrium or near-equilibrium conditions.

He then develops his process Stream of Life conception (SLC), drawing on historical precedents and articulating three ontological lessons from this approach: activity as a necessary condition for existence, persistence and identity grounded in continuous and dynamic self maintenance of form, and the proposition that order does not entail design – organisms and machines are both highly ordered, but only the machine is designed. When the case is put so clearly, it is hard to understand why one would cling on to a mechanistic approach to organisms.

The essay on a process perspective on cancer starts from the point that 'for a thing the default is persistence, for a process it is persistence that requires explanation - and in the case of the organism persistence 'requires an exquisite balance between cell division, cell differentiation, and cell death.' In the sense that cancer develops over time (the latency period), it is obviously a process operating at a cellular level, but the tumour is conventionally regarded as a thing. One implication of a process view is the influence of lifestyle over a period of time, and the concomitant implication that changes in lifestyle should be part of treatment and recovery. The authors characterise cancer as 'a progressive disorganisation of a variety of organisational levels', quoting Plankar et al to the effect that this is a 'global impairment of energy and information flow through the system' (p. 326). They highlight a possible role for disruption in morphogenetic fields as part of the pathological process, with disruption of the coherent dynamics at a specific level. This essay is an excellent example of how a process approach can contribute to clinical analysis.

I hope the book is widely read and discussed, as part of a necessary shift towards a dynamic process philosophy of biology.



THE MATRIX OF LIFE

David Lorimer

IS THERE PURPOSE IN BIOLOGY?

Denis Alexander

Monarch 2018, 287 pp., £9.99, p/b.

Denis Alexander is one of the foremost scholars in the science and religion field as former chair of the molecular immunology programme at the Babraham Institute in Cambridge and founding director of The Faraday Institute for Science and Religion - his excellent *Genes, Determinism and God* was reviewed in these pages last year. He tackles the central issue of purpose in biology, arguing that life is not *necessarily* purposeless as so frequently assumed in the public domain. The book begins with a very well informed discussion of the historical roots of purpose in biology, highlighting the crucial shift from a symbolic to a literal interpretation of the Bible, leading to a loss of a critical level of understanding and followed by the rise of the mechanistic metaphor; then the influence of Darwin on the argument from design, while also noting the overall Christian context in which the arguments were conducted.

The next three chapters provide the substance of the argument, drawing on strands within biology itself such as the increase of complexity, laws, convergence, cooperation, and molecular constraints - for instance in relation to the genetic code and protein evolution. The fourth chapter examines in detail the notions of randomness, chance and purpose, pointing out that chance can only have agency in a strictly metaphorical sense - a critique that can also be applied to Richard Dawkins. An important more general observation is that biologists impose their own metaphysical narrative on the field, which is no less true of Monod than of Alexander himself. In my view, he successfully makes the case that the details of biology and evolution do not lead inexorably to a nihilistic conclusion and are compatible with his Christian matrix. In this respect, he distinguishes between purpose defined in terms of biology, and a larger metaphysical Purpose that cannot in fact be read out of it.

This leads on to his more detailed explanation of the compatibility of the Christian matrix with the biological world, beginning with a memorable quote from Jonathan Sacks: 'Science takes things apart to see how they work. Religion puts them together to see what they mean.' Alexander reminds us that Darwin's thinking came out of a Christian background including natural theology along with natural history and natural philosophy. For him, creation is about ontology, origins, meaning and the intelligibility that renders science possible. He argues that the historically articulated Trinitarian God is immanent in the created order, metaphorically as both musical composer and conductor of the symphony of creation. He proposes three purposes for biology: diversity, the emergence of humanity with a capacity for free will, moral choice and response to the divine in terms of love, and finally the prospect of a new heaven and a new earth transcending the present. This matrix is then considered relation to death, pain and suffering as consequences of carbon-based life with 'nomic regularity' – the 'cost of existence', which he considers worthwhile, illustrating this with his own experience of cancer surgery, also, as he sees it a means of working out divine purpose in individual lives. While not all readers will accept the theological picture painted here, they cannot but respect the author's depth of analysis both in relation to biology and theology as he tackles perennial existential issues. A very valuable contribution to the field.

MEDICINE-HEALTH

WE MAY BE OUR OWN WORST ENEMIES

Gunnel Minett

THE NEUROPSYCHOLOGY OF THE UNCONSCIOUS - INTEGRATING BRAIN AND MIND IN PSYCHOTHERAPY

Efrat Ginot
(foreword by Allan N. Schore),

W.W. Norton & Company, New York, London, 2015, 336 pp, £25, h/b - ISBN 978-0-393-70901-8

To understand why a person may suffer from psychological problems, why they occur and what can done about it is the essence of all forms of psychotherapy. For this to happen it

is necessary to understand how the brain and mind work. Before Freud introduced his mapping of the mind we had little understanding about what causes some people to suffer from mental, internal struggles that sometimes take over and ruin their lives for no obvious reason. Since then psychology and psychotherapy has been through a journey trying to understand the causes of psychological problems and how to best treat them. We now know that many of our adult problems begin in childhood. But we are still not clear exactly how and why. To begin with, the focus was more on the conscious than the unconscious mind. The latter was dismissed as 'basement storage' for unwanted thoughts, emotions and behaviour, that needed to be cleared out.

With today's advances in neuropsychology we are now getting a more nuanced picture of the role the unconscious plays throughout our lives. As a consequence, psychotherapists are beginning to be able to work with their clients in more sophisticated ways to help them understand and confront the reactions and control of the unconscious, and thereby minimise the negative and/or unwanted influence, which is causing their psychological problems.
In this book Efrat Ginot explains how the unconscious is an essential and valuable part of our brain that helps us towards a form of mental homeostasis - for instance, by reacting in certain ways, such as detecting patterns in the environment and reacting with a tendency to favour repetition. Such reactions go a long way back in our evolutionary history. They enable the brain to create 'building blocks' that help us deal with each new situation. This helps us find the best possible solution and strategy in situations where we otherwise could suffer irreparable damage, i.e. when we're exposed to life-threatening situations, or suffering from mental or emotional 'overload'.

Because of the importance of our brain power (as a species) it is important that we are able to maintain a certain level of positivity as a driving force in life. (A newborn baby that is not getting enough attention from the environment even runs the risk of dying from the neglect.) So just like the signalling from the body's systems for maintaining physiological homeostasis (or inner balance), such as hunger, sweating, shivering, etc.., we have a similar system for maintaining a mental state of homeostasis. This can consist of strategies (often developed very early in life) to adjust to the environment, which is absolutely vital for the child to develop into a fully functioning adult. This can be learning early on to be pleasing to a demanding parent, to 'shut down system' to prevent bad experiences from entering into awareness or to develop habits aimed finding the best solution for us in a particular situation.

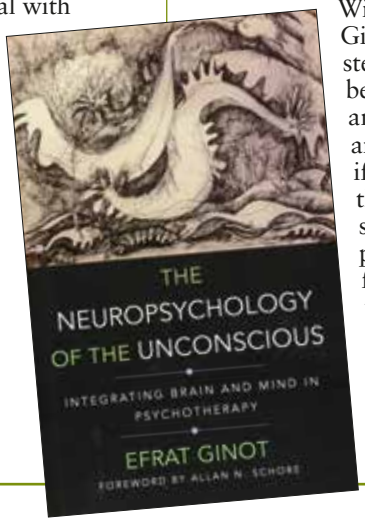
The problems with these unconscious strategies to help us through life is that they may become rigid and difficult to change or get rid of when we no longer need or want them. This is where psychotherapy comes in. To help to change what was once a useful strategy for a certain period of our lives, but which in present time may be causing psychological problems and preventing us from having a positive experience of life. Ginot writes: *"The process of developing unconscious and automatic defensive systems is closely intertwined with implicit and explicit learning processes. Learning occurs when specific behaviours, emotional reactions, comforting thoughts, or soothing internal or external responses, from simple avoidance to complex cognitive machinations such as the tendency toward grandiose self-soothing, take hold in the face of an immense blow to the self. Learning is also crucial when a very negative and faulty self-evaluation develops; a child has no choice but to internalise as his own impatience, criticism, neglect, or lack of acceptance. These communications become the dominant measure of his self-worth." (p150)*

It can be a big challenge for a psychotherapist to deal with the unconscious since it may involve and trigger unconscious patterns in both client and therapist. In her book Ginot highlights some of these difficulties, such as the lasting power of anxiety, therapeutic enactment, aspects of affective dysregulation, repetition and resistance and intergenerational enactment of trauma.

In her words: *"Unconscious processes are vast and ever-present, and they are characterised by learned and reinforced neuropsychological patterns that essentially form the foundation for our conscious existence."* (p. 229)

It is only by understanding these processes and their influence that a person can be helped to change in a more permanent way. She writes: *"Although specific therapeutic approaches may greatly differ, all therapists try to help patients achieve greater affect regulation, a sense of personal fulfilment and well-being. Undoubtedly, a neuropsychological understanding of the unconscious can provide us with more nuanced approaches to the nature of change and to its underlying factors, the potential impediments to enduring shifts, and conversely the therapeutic processes that may contribute to positive changes. (p. 163)*

This is particularly important in psychotherapies that focus on accessing the unconscious (such as body oriented therapies, hypnotherapy, dream work etc.). Unless the therapist has a good understanding of how and why our unconscious influences us and can assist the patient to a positive change, the risk is that unconscious remains a mystery (following an old view of the unconscious) with no or little real change for the patient. Ginot writes: *"Only on recognising and becoming aware of the nature of our emotional and behavioural neural patterns, the childhood necessity for an array of defences, the emotional and interpersonal learning that took place unconsciously and without our conscious will or participation, our helplessness as children to affect through the course of events, can we start and attempt to connect with painful self-systems." (p. 125)*



With this book Efrat Ginot is taking a big step to close the gap between neuroscience and psychology. It is an essential process if we are to develop the best possible strategies for helping people to move away from having the unconscious as their own worst enemy, to being fully in charge of their lives in a positive way.

HOW TOO MUCH MEDICINE IS ENDANGERING OUR HEALTH

John Kapp

TOO MANY PILLS

Dr James le Fanu

Little, Brown, 2018, 303 pp., £13.99, p/b –
ISBN 978-1-4087-0977-1

Personal testimonies to this London GP tell of: (back cover) 'being coerced into taking drugs which they do not need, debilitated by their adverse effects – and their almost miraculous recovery on discontinuing them.' He recommends patients to ask much more searching questions about the ***benefits and risks*** of the medicines they are taking'.

The author writes (p. 1) 'In just fifteen years the number of prescriptions issued by family doctors in Britain has increased ***three-fold***. (This increases at 7%pa compound, and 1.1 bn monthly prescriptions were written in 2017, so now 2 drugs are being prescribed continuously for every man, woman and child in the country) Everyone agrees that this is too many – a regular topic of conversation down at the pub, on the golf course and the bowling green. Some are apprehensive about even visiting the surgery lest they be burdened by taking yet more drugs. Dutiful children visiting their parents are ***aghast*** at the ***six, eight or ten*** different types of pill cluttering up the bathroom cabinet'. (now costing us taxpayers nearly £20 bn pa)

'Doctors themselves recognise the problem with ***nine*** out of ***ten*** GPs in a straw poll acknowledging that they prescribe 'too many pills'….. (p. 2) 'There is no drug intended to do good that does not do ***harm*** in some. And the more that are taken the greater the ***chances*** of harm. Over the past 10 years, thousands of readers of my weekly medical column have written to tell me of the misery of the muscular aches and pains, lethargy, insomnia, impaired concentration, gut disturbance and general decrepitude caused by their drugs – and the almost miraculous ***recovery*** on discontinuing them'.

'The adverse consequences of poly pharmacy (literally many pills) are ***vastly greater*** than is commonly appreciated, being responsible for a remarkable 75% increase in the numbers requiring admission for adverse drug reactions. And polypharmacy can also be fatal, almost certainly a contributory factor to the recently observed ***decline*** in life expectancy – ***600 more*** people dying every ***week*** in 2015 compared to previous years.' (p. 210) 'it makes no sense at all to take a drug intended to ***prevent*** some medical condition in the future, if it is causing you ***problems now***.' Yet the pharmaceutical industry had other ideas. (p. 24) 'the future prosperity entailed moving beyond the development of drugs to combat disease, by creating a market where they could ***sell to everyone*** – targeting the hundreds of millions of the apparently well and healthy, persuading them (and indeed their doctors) that they ***had some medical condition warranting treatment***. The most obvious way this might be achieved was to re-designate previously 'normal' physiologically variables as '***abnormal***', widening the net of those requiring ***lifelong*** medication with blood pressure and cholesterol lowering drugs.'

For example, the old rule of thumb for high blood pressure recognised that it naturally increases with age, so was: (p. 197) '100 plus the patient's age - which for someone aged 80 was a seemingly alarming 180. However, in the early 1990s this rule of thumb was rudely ***overturned***……..to the current threshold of ***150/80***. He also exposes the damning verdict of meta studies of the 5 pillars of polypharmacy (p. 208):

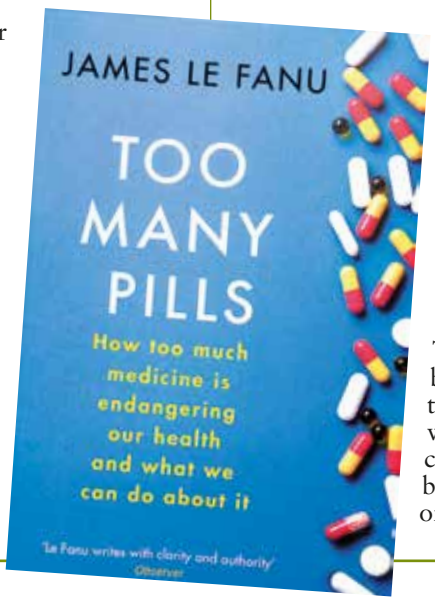
'1 Hypertension: This review found that compared to a placebo, an antihypertensive drug did ***not reduce any outcome*** including total mortality, total cardiovascular events, coronary heart disease or stroke.

2. 'Raised Cholesterol. Statin therapy in those at low risk ***does not reduce*** overall mortality or serious illness, with an ***increased risk*** of causing side effects from minor and reversible to ***serious and irreversible***.

3 Diabetes. A low carbohydrate diet resulted in substantial weight loss in all patients and brought about normalisation of blood glucose. Seven patients were able to come off medication. (see also below)

4 Osteoporosis. Drug treatment can achieve at best a marginal reduction in hip fractures, at the cost of ***serious medical adverse effects*** and forgone opportunities to have a great impact on the health of older people.

5. Cardiac cocktail. It is important to challenge the assumption that the efficacy and safety of drugs given in the relatively short term remain the same over the long term.' (p. 250) 'And then there is the possibility, illustrated by Prof Julian's near-death experiences, that beta blockers previously tolerated, can become with time dramatically less so, producing a potentially fatal slowing of the heart rate, and a precipitous fall in blood pressure on exertion.' (pp. 130,131) 'the defining feature of their illness (diabetes) being carbohydrate intolerance. And so it has been ever since that those with diabetes, encouraged to ***include*** starch carbohydrate foods (bread, pasta, potatoes, noodles, rice and cereals) at each meal, have ***struggled*** to lose weight and lower their levels of blood sugar, relying instead, as those experts recommended thirty years ago, on ***drugs*** to do so. This…. accounts for the ***four fold*** increase in type II diabetes over the past twenty five years - an ***iatrogenic catastrophe*** of epic proportions.' Wikipedia says that 8.3% of the world's population had it in 2015, and 90% have type II, for which: 'the most common cause is excessive weight, and insufficient exercise… Prevention and treatment involve maintaining a healthy diet, and regular physical exercise, a normal body weight, and avoiding use of tobacco.'



This courageous book exposes the scandalous way that drug companies have betrayed the trust of doctors in

prescribing fake remedies, and have conned governments to finance them at us taxpayers' expense. I am also inspired by the patients James quotes who recovered their previous good health with the courage to take themselves off pills scaremongeringly prescribed, which reminded me of the line: 'keep tight hold of nurse, for fear of finding something worse.'

John Kapp, johnkapp@btinternet.com, www.reginaldkapp.org. (my ***emphasis***)

..LIFE IS BUT A DREAM

Gunnel Minett

THE DREAMLIFE OF FAMILIES - THE PSYCHOSPIRITUAL CONNECTION

Edward Bruce Bynum, PhD

Inner Traditions, 2017, 275 pp., £14.99, p/b - ISBN

Although we still have a lot to learn about dreams, why we have them and what they mean, we can conclude that they play a big part in our lives. As this book points out, they often represent a true expression of our innermost thoughts, a version that is uncensored by the conscious mind. They can also express our connection with others, family and friends, past and present in ways we normally would not perceive them. Dreams can also solve problems of all kinds both past, present and future ones.

From perhaps a somewhat unexpected environment, I can give a personal example everyday 'problem solving' via dreams from my own past history when I worked in a bank. Despite an otherwise very conservative environment, we had a well establish method of solving mistakes we had made during the day, which usually meant the embarrassing situation of giving customers too much or too little money. When we could not find where we had made the mistake, we were told to go home and sleep on it. Mostly this had the effect that the person in question came back the next morning having 'remembered' in a dream where they had made the mistake.

In his book, Edward Bruce Bynum presents a comprehensive and integrated view of traditional dream analysis and family psychology both from a clinical science approach, but also drawing on old traditions from Africa, China and India and from parapsychology. He explains and illustrates with numerous examples how our individual unconscious is part of a larger collective or family unconsciousness and how dreams can express this.

One of the really positive aspects of the book is that it approaches our interest in dreams both from a current and historical angle: it points to the way we lived in (extended) family groups and the role dreams played there. This ancient way of life may often be dismissed as superstition based on ignorance ('now we know better'). But, as the author points out, even if we now live more isolated lives, and have more individual freedom, the extended family can often have a positive effect on our inner wellbeing. We seem to have a need to get so close to others that we can share both their conscious and unconscious life in the form of dreams.

However, going back to closer family ties doesn't necessarily mean returning to the biological family. Such a return to closer family ties would probably demand an impossible amount of change in our modern societies. But an 'extended family' does not have to be biological. As Steve Minett describes in his book *Gazing at the Stars*, well managed family constellations aimed at providing the optimal environment for child care can be a very good solution for adults as well as children.

Bynum's book is full of recorded dreams that reflect both major and minor events in our lives such as illness, birth and death and medical emergencies, that all seem to have a special effect on our dreamlife. These dreams can also be simultaneous shared dreams, telepathic or precognitive dreams. Regardless of the fact that these types of dreams may not have an explanation within our current scientific paradigm, they most certainly appear often and strongly enough to be taken seriously, which is exactly what this book is doing.

PHILOSOPHY-SPIRITUALITY

LOOKING BEYOND REDUCTIONISM

John Clarke

WHAT IS PHILOSOPHY FOR?

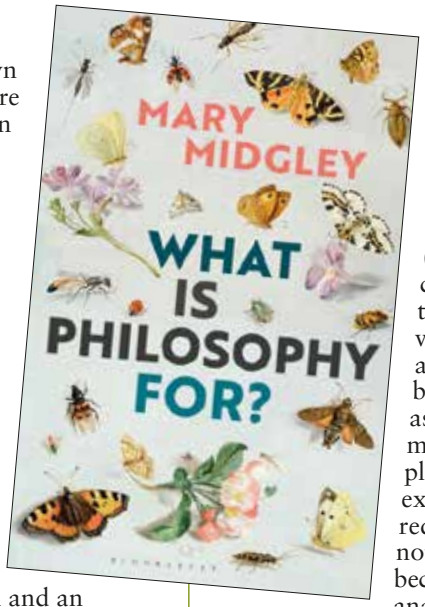
Mary Midgley (late SMN)

Bloomsbury Academic, 2018, 223 pp., £16.99, p/b - ISBN 978-1-3500-5107-2

To reach the age of ninety-nine years with all one's mental faculties intact is quite an achievement even in this time of increasing life-span. But to write a book on philosophy, one which makes the reader sit up and think deeply about modern culture and its future, is a singular personal triumph. The key word in the title of this book is 'for'. This indicates straight away that this not another broad-ranging introduction to the various problems and fields of philosophy, but a spirited polemic which, as announced on the first page, addresses the question: 'What is the aim, the proper object of philosophising? What are we trying to do?' Her answer is in effect a summary of a life engaged in the practice of philosophy, a scholarly yet engaging confrontation with some of the important intellectual issues of our day.

What comes through very powerfully in this book, as indeed in all Mary Midgley's writings, is a passionate belief that philosophy is not just one academic subject amongst others, and certainly not a kind of science, nor is its role a sort of pontifical authority ruling over other academic subjects, but has a central place in our lives, 'a continuous necessary background activity…[which] profoundly shapes our inner life' (p. 81). It has an almost therapeutic role (not her term) in sorting, examining, comparing and assessing the varieties of myths and worldviews which underpin our contemporary ideas, values and institutions. In more down-to-earth terms she found impish delight in referring to her philosophical approach as akin to plumbing, not just because it services some of the basic needs of daily life but because it can at times go badly wrong and lead to domestic upset and anguish and needs sorting out. In this way philosophy can 'service' the hidden intellectual structures of our lives, the hidden assumptions and

contradictions of our world-views. Our own times, she believed, are particularly needful in this regard.



This intellectual plumbing is no mere academic exercise. Though for some years she lectured in philosophy at Newcastle University, she had little time for what she describes as 'the modern logical and analytical style of philosophising' (p. 10), with its rather detached, a-historical approach and an increasing emphasis on research rather than teaching which, she argues, was an important factor in leading to the closure of eight British departments of philosophy in the Thatcher years. By contrast, Midgley approached her subject with passion and moral commitment, and with a full awareness of its place and importance within historical and cultural contexts, and within the exercise of our imaginative faculties.

This final book reaches back to her first major work, *Beast and Man* (1978), where she sought to bridge the dangerous gap, opened up in many areas of modern thought, between the human and natural worlds, and which led to her enthusiasm for environmental issues, to support for the Gaia hypothesis, and to a passion for 'reviving our reverence for the earth'. This led in turn to an abiding concern with the place of the current scientific worldview within the formation of contemporary values and goals, and with the deep influence of the myths which have been constructed around and beneath the natural sciences. These myths constitute various forms of scientism which treat science, not as one among many sources of information about the world, but as the exclusively valid source of *all* knowledge, and hence the object of almost religious reverence.

Midgley takes a completely opposing view. She sums up her own approach in this book as one of 'exasperation against the whole reductive, scientistic, mechanistic, fantasy-ridden creed which still constantly distorts the world-view of our age….[which] is revered as the only possible alternative to a supposedly unthinking, moralistic and religious….. orthodoxy' (p. 190). By contrast with this univocal view, her approach could be described as one of methodological pluralism, so for example: 'Pure reductionism will not work, precisely because it does not analyse the kind of complexity organisms display' (p. 26). We are faced with many puzzles in life, she argues; 'scientific, historical, practical, poetical, moral, social, logical, political or religious' (p. 193), and philosophy is not a matter of simply trying to *solve* these puzzles or formulating a total, final world-view that encompasses them, but involves exploring the many particular, often diverse, ways of thinking, of world-views, that will be most helpful as we try to explore the constantly changing world. And it is one in which 'philosophical thoughts are never final' (p. 6).

It follows from this that while it is important to search out the sometimes hidden interconnections between these world-views – like we would if we had a plumbing problem - it would be a serious mistake to the attempt to reduce them to a single method, namely that of the physical sciences. This clearly is not an attack on science itself about which she demonstrates profound respect and considerable understanding, but rather a recognition that the world is too complex, too inescapably plural, to be reduced to a single set of theories, and is in danger of forestalling investigation into key elements of life such as purpose, meaning, mind, freedom and responsibility. Our world, she points out, is complex and variegated, requiring many different 'thought patterns' and perspectives. Even the natural sciences themselves lose their individual significance and validity if pressed into the single mould of physics.

Several mythmaking excursions are used to elaborate her argument for pluralism, and to illustrate the need for philosophy to take a broad and inclusive rather than a narrowly specialised view of life. The first of these is the positivist approach of the Vienna Circle which became in the middle years of the twentieth century a kind of universal solvent that claimed to absorb all epistemological certainty and to eliminate all else as meaningless - 'scientistic puritanism' as she calls it – and which sought to disinfect modern culture of gods and souls. Midgley is no advocate of religious dogma, but sees in this approach an intellectual and cultural impoverishment leading to a kind of barren materialism which effectively eliminates human freedom and individuality.

A similar treatment is offered for a related and an equally influential twentieth century myth, namely *behaviourism*, still influential in some quarters, which she accuses of eliminating its main object, the human subject itself. By focusing exclusively on external, observable behaviour it manages to deny the possibility of talking meaningfully about the whole range of problems concerning human life, especially our 'natural sociability, and our 'constant need to deal with our own and each other's inner conflicts' (p. 173).

Midgley's most acerbic critique of reductionism is reserved for one of its more recent manifestations, the *singularity* associated with the supposedly inexorable march of artificial intelligence, the moment at which the world will be transformed - in 2045 according to Ray Kurzweil. She points out that this recent development is an intellectual descendant of the well established 'myth' – 'mechanolatry', a 'new oracle' - , dating from Descartes and the scientific revolution, that the universe as a whole is a machine, and that even living beings, and perhaps even minds of living beings are part of the same 'dazzling image'. This new and potent myth 'has somehow worked its way into our thinking… by its own dramatic force'. What was formerly attributed to God is now credited to machines. Computers and related technologies have given this myth new life, and now we face the prospect of being bypassed and taken over by the myth of transhumanism.

Much mythology, she points out, has been absorbed into this particular piece of technological

wizardry, some bordering on pure fiction, some the product of wild futuristic speculation. Here the 'exceptionally eminent' astrophysicist Martin Rees is singled out for special attention, accused of inventing 'new superstitions', and making outlandish and frightening claims without the support of adequate evidence or argument. One recalls here her earlier irritable debates with another eminent proto-reductionist, Richard Dawkins, who gets only a brief mention here, though she is still adamant that his approach to genetics leads via scientism to an unacceptable form of reductionism.

Towards the end of the book she confronts the issue which lurks beneath many of the problems she has grappled with in this book and in her professional life, namely the question – the myth - of mind-body dualism. Part of the problem here, she speculates, is that we have tended to assume that 'matter is inert, dead, and inevitably we become deeply puzzled as to how such an active phenomenon as conscious mind can be in any way connected with it. Returning once again to her earlier concerns with evolution, she points out that matter has within it the potential for forming the vast variety that constitute the natural world, and that matter therefore cannot be the inert, inactive, neutral stuff of dualist theory. She goes on to say 'We surely need to look for a fresh start', but she has now alas laid down her pen and it is up to us to take up her challenge.

This book is not only a lively, witty and beautifully written work but is an important defense of philosophy which places it once again at the centre of our cultural and intellectual life, not only by demonstrating its importance in challenging many of the myths of our age but also by its capacity to take an embracing overview of human concerns without resorting to simplifying dogma or fantasy. *What is Philosophy For?* the last of a dozen books and many articles and public lectures, is a fitting tribute to a woman who gave much to philosophy, and to the world beyond. The SMN, of which she was an honorary member, will remember her with love and gratitude.

A RICH SPIRITUAL TREASURE

David Lorimer

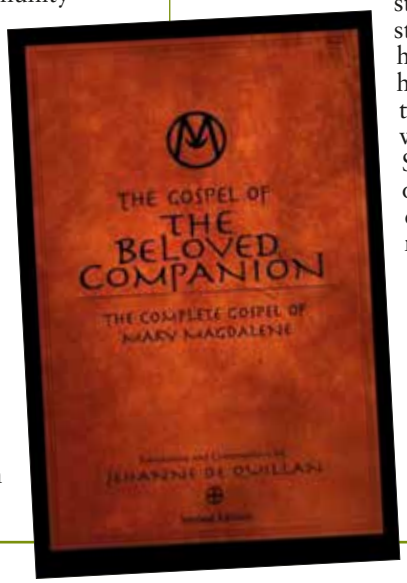
THE GOSPEL OF THE BELOVED COMPANION

Translation and Commentary by Jehanne de Quillan

Editions Athara, 2010, 265 pp., available on Amazon, p/b – ISBN 978-1-4528-1072

Over the summer, I received an enthusiastic email from Anne Baring urging me to buy this book, which I ordered immediately. Along with I'm sure many other readers, I have an enduring interest in the Gnostic Gospels, having read the book by Elaine Pagels in the early 1980s and many other texts besides. I now live in the Cathar area, where the story of Mary Magdalene is very present, both historically and archetypally. I am reminded of an occasion when I was leading a seminar some 30 years ago during which we went to the cave at Sainte Baume, where Mary is reputed to have spent her later years. A sensitive among us put out the question about the historical reality of her presence, to which the reply was that it did not matter whether or not she had been there physically if her spirit was now present.

This book is the first translation into English of what purports to be the complete Gospel of Mary Magdalene. As such, this is a momentous publication. The editor explains that the manuscript was reputedly brought from Alexandria to the Languedoc in the early to middle part of the first century and was translated into Occitan in the early 12th century. The manuscript has been preserved within a spiritual community since that time and this translation is from the original Alexandrian Greek. Of course, scholars would love to have access to the manuscript, but the translator does not feel she can break faith with those who have sacrificed so much to preserve it for over a millennium so that its message could one day be released back into the public arena, an action criticised by some members of her community. Hence, readers have to approach the Gospel with open minds and decide for themselves in the light of the text itself and the translator's comparative critical analysis with other canonical and Gnostic Gospels. The Gospel is set out in 44 chapters with verses, but the translator also explains that there is no punctuation in the original, and a version like this is presented later in the book.



The narrative is simple and powerful, and conveys vividly for me the non-dual state from which Yeshua spoke and taught: "Have I not told you that I am in the Spirit as the Spirit is in me? It is man who sees only poverty, for he sees with the eyes of the master of the world. But where man sees poverty, the Spirit sees only abundance. What the Spirit sees I see, and what I see the Spirit sees. And what the Spirit sees is. (6:8)" I find this an incredibly powerful statement, and many passages are preceded by the phrase 'only from the truth', corresponding to the New Testament translation, 'verily'. In 21:2 we read "You do not know me or know where I am from. I have not come of myself, but the One who sent me is true; that One is the One whom you do not know. I know the Spirit because I am of the Spirit and the Spirit sent me."

Then again in 27:3: "I have told you, and you do not believe. The works that I do in the name of the Spirit, these testify about me. But you do not believe, because you cannot hear my voice. Those that hear my words and follow them, to them I give eternal life. They will never perish. The Spirit, who has sent them to me, is greater than all. The Spirit and I are one." At this point, the Pharisees take up stones again to stone him, and he answers: "I have shown you the many good works from the Spirit. For which of those works do you stone me?" Quite a retort! In 35:12, Yeshua states in response to a question by Thomas that they do not know where he is going so how can they

know the way: "My words are the Way, the Truth, and the Life. For my words are given of the Spirit, and no one comes to the Kingdom except through Her teachings. If you had known and understood my teachings, then you would have known and understood the One who sent me also." (did you notice Her….?)

The most potent and seminal passage in this Gospel comes towards the end, when the disciples come together after the crucifixion in the house at Bethany, and Mary tells them about her experience in the garden of the tomb. They are worried about exposing themselves to danger by going out and preaching. Mary stands up, raises her right hand and tells them not to grieve and to be resolute as Grace will protect them: "Let us praise his greatness, for he has prepared us and made us truly human." As a result of this statement, 'she turned their hearts to the good' and Simon Peter says to her: "Sister, we know that he loved you more than any other among women. Tell us the words of the Rabbi, which you remember, which you know and understand, but we do not, nor have we heard them."

What follows is beyond measure, a priceless spiritual treasure so precious that it may well be, as Anne suggested to me, the real treasure of the Cathars. I read it first while having a morning coffee in Lisbon, a moment I will never forget. She says that she will proclaim what is hidden from them, and that Yeshua had said to her, "Miryam, you came into being before coming into being (*think about the significance of this!)*, and whose eyes are set upon the Kingdom, who from the beginning has understood and followed my teachings." He then shows her in a vision a great tree whose roots are in the earth, 'which is your body'. The trunk extends upward through the five regions of humanity to the Crown, which is the Kingdom of the Spirit. There are eight boughs on the tree and each bears its own fruit, which must be eaten in all its fullness; between each bough there is a gate with a guardian who challenges the unworthy who try to pass. She then describes the levels of initiation, the ascent from darkness to light. You will have to buy the book yourself in order to appreciate the sheer symbolic power of this vision. At the end, we read that many of the disciples did not understand what she had said and grumbled against her among themselves about these 'strange and complicated ideas'. Simon Peter resents her exclusive access, while Levi defends her, remarking that "surely as his companion, Yeshua knew her better than all others. That is why he loved her more than us."

Readers may have caught the tone of the Gospel of John from these extracts, but there are also passages that parallel the Gnostic insights of the Gospel of Thomas. In the second part, the translator analyses some of these parallels, using original Greek papyrus manuscripts for comparative purposes (the Greek is quoted in many instances). Using close textual analysis, she makes the case that this Gospel may even have been a source for the Gospel of John in terms of dating. There are also verses such as the famous passage about making the two into one that parallel the Gospel of Thomas (see below), with the significant difference that the passage in the Gospel of the Beloved Companion is set within a coherent narrative framework, whereas, in the Gospel of Thomas it is just a fragment. Then in the Gospel of Mary, there are whole chapters missing, and the Gospel of the Beloved Companion illuminates these and other extant passages. The translator's commentary also sheds further light on key passages from the Gospel. She sets the burial rites surrounding Jesus (only explained in John) within the cultural context of the time, where only the immediate family would have been involved, with the wife or sister playing the leading role. This reinforces the message that Mary Magdalene was indeed the Beloved Companion.

The Gospel of John was beloved to the Cathars, and was laid on the head of candidates as they were initiated as a Parfait or Parfaite. This is the mystical canonical Gospel, which, ironically, contains the words used by fundamentalist evangelicals to insist on the exclusive divinity of Christ, when they should be interpreted symbolically. Indeed, the Beloved Companion passage about the way, the truth and the life quoted above makes a lot more sense to me. So, dear reader, as the translator herself suggests, you will have to make up your own mind about the status of this Gospel by reading it for yourself. It is significant that the Vatican recently promoted Mary to the status of The Apostle to the Apostles, and some of you may have seen the corresponding film that came out this year. This Gospel goes a great deal further, stressing the importance of entering into the silence.

I mentioned above the parallels with the Gospel of Thomas, so I will finish this review with this passage referring to stillness and silence (30:10): "If you bring forth what is within you, what you have within you will save you. If you do not find that within you that is from the Spirit, what you do not find within you will be your death. There is light within a person of light, and it shines on the whole world. If it does not shine, it is dark. Only from the truth I tell you, be still and know that I AM. Those with ears, let them hear." It is often said in this area that, following the massacre of 225 Cathars at Montsegur on March 16th 1244, after 700 years the Vine will once again turn green. This beautiful and inspiring gospel is surely the fruit of this Vine.

ASK WHAT YOU CAN DO 'JUST RIGHT'

Martin Lockley

THE MONARCHY OF FEAR: A PHILOSOPHER LOOKS AT OUR POLITICAL CRISIS

Martha C. Nussbaum

Simon and Schuster, 2018, 249 pp., $25.99, h/b – ISBN 978-1-5011-7249-6

I recently had the chance to see Martha Nussbaum speak on her new book, *The Monarchy of Fear*, and learn that she is widely acclaimed as a prolific author, philosopher and advocate for the arts, humanities and human rights. As she divulges, her heroes include Martin Luther King, Nelson Mandela, Mohandas Gandhi, a few thoughtful Greek philosophers and various contemporary psychologists including women, who are mostly absent from the former categories. All have fought non-violently against fear, violence and bigotry, obviously in many cases at great personal cost.

I have always been a believer in the biological, developmental and evolutionary notion that ontogeny recapitulates phylogeny in a myriad

subtle and varied ways. Put another way we reap what we sow. If we teach our children well (nurture good ontogeny), and avoid undue fear, repression and bigotry, they will grow to contribute to the evolution (phylogeny) of a society where such destructive forces are less likely to rear their ugly heads. Speaking of ugly heads Nussbaum takes us back to Homer, and the heyday of Greek philosophy to remind us of the dangers of unrestrained fear and anger (the latter being the first word in the *Iliad*) and also the "child of fear" as Nussbaum and others have put it.

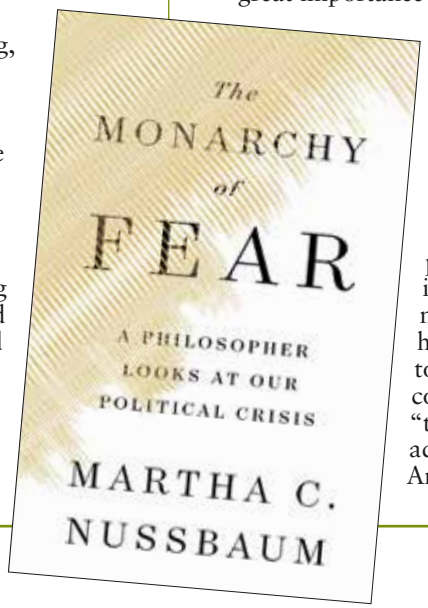
The Greeks had a visceral sense of the ugliness of anger in their sense of the 'Furies,' repulsive, horrifying, disgusting creatures belonging says Apollo "in some barbarian tyranny where cruelty reigns." They "make animal noises, moaning and whining." All this is portrayed in 'Oresteia,' the famous tragedy of Aeschylus (458 BCE) which "explores the curse of retribution" arising from "unbridled resentment." The Greeks dealt with these dark forces in two ways. First by Athena's "recognition that the legal system must incorporate… [one might say 'tame']… and honour retributive passions." The second way is more transformative, and needs to do more than putting the *Furies* in a cage. Athens must be "liberated from the scourge of vindictive anger." *Lucretius*, for example, "says that all political anger is only an outgrowth of fear." The transformative element came in the efforts the Greeks, and later the Romans, made in a "cultural struggle" against what they saw as anger's destructive power and the danger it posed to "democratic institutions" which require "forward-looking" justice.

What does all this cultural history (phylogeny) and powerful, emotional passion [mythology?] have to do with ontogeny? [My question]. It surely deals with the parallel development of "infantile helplessness and its adult cousin the fear of death." The young child is in a sense a "monarch" with "no way of surviving except by making slaves of others." The infant lives in a purely or predominantly emotional world in which the external universe is so often an uncontrolled and uncontrollable source of potential fear, only mitigated by the constant reassurances of adults who know how to bring 'just' order to the child's world by knowing what's good to help balance the democratic order: i.e., both for the developing child and the developed adult.

Thinking in terms of Jean Gebser's consciousness structures (especially the magic, mythical and mental-rational) discussed in his seminal *The Ever Present Origin*, and elaborated by Ken Wilber and others, we are reminded, that even in a modern world, "thought" to be infused with "thoughtful" rationality, ever present consciousness structures, ostensibly characteristic of a former, historical or 'other' phylogenetic "structure" can "erupt" unpredictably. Such eruptions give the rational, "progressive" mind the sense of retrograde steps, taking us back in time to a world where more uncontrolled, petulant, infantile, primitive or "furious" consciousness structures prevailed. Such rational perceptions may be understandable to like minds but perhaps not to all other consciousness structure eruptions.

Having pointed out that there is nothing much new under the sun, as Apollo no doubt noticed, the connection between fear and Nussbaum's subtitle reference to "our political crisis" is rather obvious, but none the less timely and necessary. It is entirely in keeping with another much-reported book, *Fear*, by celebrated Watergate journalist Bob Woodward. But to point the finger at fear-mongers is a form of lesser, and avoidable fear mongering, especially if something transformative and "forward-looking" does not follow.

Nussbaum avoids, as best one can, naming and pointing fingers at others who are fear-mongering and not thinking forwardly. As transformative examples she cites King, Mandela and Gandhi, but especially King, as an American who railed against prejudice and injustice as crisis-generating, socio-political problems, but in the end dreamed with a forward-looking vision of a transformed world where black and white children could live as brothers and sisters. His vision was passionate, hopeful, based on the best of Christian principles, and untainted by calls for violence retribution. One may pay a stiff price for such forward-looking vision.



The book's ontogeny follows a similar trajectory, dealing first with fear and anger and their infantile psychological roots, then with [adolescent?] fear-driven disgust and exclusion, then [secular-materialist?] envy, sexism and misogyny, but at last we end with a [wisdom?] chapter on "love, hope and vision." Nussbaum asks what are the "basic human entitlements…that all humans must have… if …society…is to count as even minimally just." [These rights may of course change as our social consciousness evolves]. Since "entitlements" is a controversial word, especially in the USA, where it can imply some sort of un-earned, financial, material or status reward, Nussbaum uses the term "capability," implying, I think, that these are rights we are capable of providing all citizens, perhaps not without some reform and enlightened education, so as to avail ourselves of a just and capable society. [I am not quite sure why the term rights would not suffice].

Her list of 10 'capabilities' [rights?] begins with "Life," "Bodily Health" and "Bodily Integrity" (meaning freedom of movement, safe from violent assault), followed by "Senses, Imagination and thought," "Emotions," "Practical Reason" and "Affiliation," all freedom of choice capabilities, and, lastly, "Other Species," "Play" and "Control over one's Environment." This seems rather a mixed bag of capabilities, for the average citizen to recall as an intellectual check list, but Nussbaum explains her focus is "on capabilities rather than actual functioning because the theory gives great importance to choice." She argues that these capabilities provide "a good basis for constitutional principles" and as an activist philosopher it is perhaps natural for her to incline towards constitutional "theory." She admits "many Americans right

now don't agree with my view, which they will see as resembling European-style social democracy." [America may be in the throes of proving there are worse fates]! She then suggests "all Americans… [need] … to figure out what they really do think about such matters, prior to entering a contentious political debate." Fair point, but no doubt too little too late for some segments of the population, at least 'right now.'

Nussbaum ends with a call for "National Service" which she sees as "imperative" to address the political crisis and the "problem that Americans lack a sense of the common good" and are unable to think "outside their economic or racial group." I think she may mean "too many," not all, Americans. She makes it clear that this would be "civil service" and, perhaps controversially, suggests a German model, *Zivildienst*, an alternative to military service, which ended in 2011. Here again Nussbaum is no doubt well aware her proposals are controversial. But perhaps tough times call for stern measures, and Americans surely resonated deeply with JFK's "ask not what your country can do for you" speech. As Apollo shines a perennial light on America's political crisis, Nussbaum is asking, again, what Plato and Socrates asked long ago: what makes for a civil society where individuals are just and forward-looking in how they examine themselves and their fellow citizens? I sometimes ruminate on the phrase "just right." It is indeed a delicate balance.

PSYCHOLOGY-CONSCIOUSNESS STUDIES

DEAN RADIN'S NEW LUMINOUS SIGILLUM

Vasileios Basios

■ REAL MAGIC: ANCIENT WISDOM MODERN SCIENCE AND A GUIDE TO THE SECRET POWERS OF THE UNIVERSE

Dean Radin (SMN)

Harmony Books, 2018, 258 pp., $16, p/b - ISBN-13: 978-1524 758820; available at "www.deanradin.org"

"… among philosophers, 'magician' then means a wise man who has the power to act."

– Giordano Bruno, *"On Magic"*

Magic! When this word is uttered it brings to mind a wide array of images, from dark vaults and evil spirits to angels and heavenly rainbows. It is definitely the magic of J.S. Bach's music (or Fred Mercury's, your pick) and also the magic of that delicious dessert we had the other day. But what is *"Real Magic"*? Dean Radin, the chief scientist of the Institute of Noetic Sciences and a noted best selling author, brilliantly defends the thesis that magic is *"a natural aspect of reality"*. That's real magic and with a real tour de force in his book Dr. Dean Radin offers us the connection of real magic with ancient wisdom and modern science as well as a guide to the secrets powers of the universe, exactly as its subtitle affirms.

A Magus, an old Persian/Median word of proto-Indo-European origin adopted in Greek means the one who is: able to, to help; has power, a sorcerer. Magus is the wise, the seer, the interpreter of dreams and in its bad sense the enchanter, the trickster, the impostor, the charlatan. Surprisingly enough the word *"machine"* derives from the same root as magic (*~mech/mach*). Originally a machine, a mechanism, signified a device stemming from the mind that empowers us by doing things for us. Yet, today it has inverted its meaning; mechanical means a mindless repetitive operation. And according to mainstream modern scientific meta-paradigm, we live in a mechanistic universe born out of randomness and devoid of purpose. Given the fact that not even a single machine was ever built without a purpose we arrive at an oxymoron! How did this happen? Where the magic has gone?

Dean Radin in his book "Real Magic" succinctly and brightly narrates this course of events that led to the present disenchanted age. The history narrated here can convince even the most die-hard skeptic that what was once considered natural-magic by the ancients is a scientific fact for us, the moderns; or as Arthur C. Clarke famously put it "*any sufficiently advanced technology is indistinguishable from magic*". Can we say the same for what science cannot understand presently and refuse to study? Are phenomena such as the placebo/nocebo effects, premonition, precognition, telepathy, telekinesis, clairvoyance, extra-sensory perception, spontaneous healing and near-death experiences just 'magical' that await a future science for explanation? Oh, no. In the eyes of the prevailing scientism within the contemporary mainstream scientific establishment all these are generally considered just fluffy-thinking, ill-posed evidence, quackery or just wishful thinking and downright impossible.

Dr. Dean Radin's take on the above enigmas is amazingly interesting and equally amazingly informed. His readers will benefit greatly from the well organised bibliography and clear exposition of the many interrelated subjects, the evidence and references he provides and also from all the pointers to his own brilliant and seminal work over the years. Dean Radin's presence in conferences, workshops, public debates, seminars and 'webinars' is abundant, well documented and easily accessible to the wider public. The book offers a great incentive to follow up these as well as the creative unfolding of his thought and work.

Knowledge is power. So, evidently power loves to utilise knowledge. The magicians and seers of the past – from the court in Persepolis, Hermes Trismegistus and the Pharaoh, Aristander of Telmessos and Alexander the Great, Merlin and King Arthur, Zhuge Liang and Liu Bei, to John Dee and Elizabeth I of England, as well as the whole academy of them at Rudolf II's imperial court– have become legendary in the esoteric lore and folklore alike. But as Renaissance science gave way to the scientific revolution the influence of magic and the magicians diminished. They either

went underground or vanished altogether. The book narrates this story well and vividly. Dr. Dean Radin is renowned, also from his previous best selling books, for his participation to the top secret US government "psychic espionage program" named Stargate. So, when he discuses this aspect of the collusion between knowledge, power and magic he does so from the vantage point of an erudite scholar as well as an honest person with actual work experience on this subject. So, his exposition is both accurate and greatly fascinating.

Obviously, the materialistic, empiricist meta-paradigm of modernity could not accommodate magic as a real, "*natural aspect of reality*" as Dean Radin asserts. But did the influence of magic also disappear? Not so, says Dean Radin. "*Real Magic*" offers throughout its chapters a very eloquent presentation of the influence of magical thinking, either consciously or subconsciously in various form of our modern civilisation. It describes the bad and the good, the mundane and the extraordinary magic around. In other words, it makes the reader see the magical dimension of things considered normal and ordinary by offering a different clearer perspective on the workings of magic. Specifically, I found the chapter with the title "*Magical Potpourri*", just delightful. It starts: "*When you are studying the history and practice of magic, the first thing you discover is that everyone throughout history has been fascinated by this topic. And it seems that half of them have written at least one book about it. The scope and magnitude of the literature are mind-boggling*". Yet, Dr. Dean Radin masters his enormous sources on the material very well… magically well! He articulates his insightful remarks on the vast literature and covers the societal, both subjective and objective realms, admirably. The range of his analysis is extraordinary, from Harry Potter to psychiatry, from witch-hunt to theurgy and from the mental focus of athletes to the powers of intuition in artists and scientists; a real pleasure to read.

Actually, all the chapters are equally thrilling. But what really fascinated me, and I must confess here that it is due to my own professional bias as a physicist, is the discussion in the chapters titled "*Scientific evidence*" and "*Towards a Science of Magic*". For almost four decades Dean Radin has been designing and running experiments to demonstrate the so called 'anomalous' phenomena of mind-matter interaction. Of course anomaly is defined only with respect to what is considered normal and normality within the materialistic meta-paradigm dictates that 'mind is secreted from the brain as bile is secreted from the liver', to borrow Peter Fenwicks's favourite innuendo. Quoting Radin: *"How is it possible for a hunk of warm, wet tissue to not only describe itself in exquisite detail but also describe exotic realms that the human body and brain cannot access through its ordinary senses, and that must have been around for billions of years before we developed methods of detecting them. And do all this with mind-boggling accuracy? That puzzling question suggests that maybe the brain didn't dream up these ideas after all. Rather, the ideas dreamed up the brain. If that's the case, then, as magic proposes, we really do shape the world based on our expectations."* This point of his really hits the nail on its head!

As he discusses further in the book, information's fundamental role in physics is a resurrecting trend. The critical issue thought is that information theory, as we know it, is deprived of purpose. Its founder Claude Shannon was wise and careful enough to highlight and warn us that his general theory of information is general only to the extend that is concerned with the syntactic level. The pragmatic level was left to the technologists and most importantly the semantic level was consciously excluded as a "*hard problem*" since semantics (the meaning) fundamentally rests on the subjective side of the information currency.

Shannon was well aware that science, presently, can only deal with the syntactic, objective, and experimentally verifiable aspect of reality. The semantic, subjective, rationally or noumenally (noetically) assertible part had already been delegated to religion, theology and to, an alas ailing, philosophy. The schism was not new, René *Descartes* formally announced it but it had been imposed, with the most brutal way, on western intellectual life by the burning of the last magus of the renaissance, the neo-Pythagorean philosopher and mystic Giordano Bruno; the 'fearless one'. The subsequent persecution and strict censorship of Galileo Galilei and all their followers followed this decisive bleak moment of western civilisation and real magic disappeared from the established institutions of learning. The scientific revolution had begun. This transition is narrated at large, also so well, in the book at hand.

Nowadays, after four long centuries reigned by the disenchanted and disenchanting scientific and industrial revolutions the humanity on this planet is on the brick of collapse, in spite of our acquired power over nature and unfortunately just because of it. Obviously clinging to what 'just worked' in these past four centuries might finally destroy us. With the advent of the so called meta-modern 'information revolution', which sweeps physics too, the commonly held view of the universe as a giant clockwork seems to morph to that of a giant supercomputer. But if the universe is made up by information who is getting informed? To arrive to a consistent answer to this question the universe does not only need to *have* meaning or to *be made of* meaning, the universe has *to be* the meaning of itself. "...because thinking and being are the same" ("to gar auto noein estin te kai einai") as Parmenides put it when magic was real.

'*Real Magic*' arrives to that same conclusion above and he is in line with the pioneers of modern physics, Planck, Wigner and Penrose among others. The universe has to be considered now as a noetic, living and thinking being. Four centuries ago, Galileo had posited that *"the book of nature is written in the language of mathematics"* but the formal mathematics developed ever since has discovered, and very accurately so, just the syntax of the language that the book of nature is written. As Kurt Goedel proved, already in 1931, no formal system can capture in its proofs the whole truth. Meaning (semantics) cannot be fully formalised. So, a new language, a new living dialectic 'mathesis* universalis', is waiting to be unfolded and be learned by us. Dean Radin heralds the quest for such a new language for science and he is asking us to join him in expanding our horizons towards a science beyond a materialistic world view. As one might suspect, Dean Radin's actually acts as a magus of our times and offers us his new

luminous sigillum: this very book at hand and its empowering message. That's real magic. … "*Let's deal with it.!*" as he puts it.

The book argues in its conclusion: "*Compared to the lofty goals of enlightenment, magic is more commonly associated with the acquisition of egotistical power. But that's just a stereotype. Magic can also be used for healing, counselling, enhancing survival, and reducing suffering. The range of possibilities spanning the spiritual-material axis is vast.*" Let me close by continuing copying the quotation that he has chosen for the concluding chapter; it is by Eden Phillpotts: "*The universe is full of magical things patiently waiting for our wits to grow sharper*". Reading "*Real Magic*" surely helps us to accomplish that sharpening and is a great philosophical delight too!

(* 'mathesis'= deep knowledge, the word 'mathematics' derives from it)

Dr Vasilieios Basios *is a senior researcher at the Physics of Complex Systems Department of the University of Brussels, conducting interdisciplinary research on self-organisation and emergence in complex matter as well as aspects of the foundation of complex systems.*

RECOVERING WHOLENESS AND QUALITY

David Lorimer

SCIENCE, OBJECTIVITY AND CONSCIOUSNESS

Emilios Bouratinos (SMN)

ICRL Press, 2018,
268 pp., $19.95, p/b –
ISBN 978-1-936033-29-4

This long-awaited and seminal book arguing for a self-reflective and interdisciplinary science of consciousness goes back to the epistemological roots of Western thought and culture to articulate a new and subtle relationship between science and philosophy. The author's deep thinking and extensive knowledge challenges the reader to re-approach perennial questions with a holistic mindset and in a new and self-critical light. The 16 chapters are grouped into three parts: the argument from quality thinking, a self-reflective, interdisciplinary science of consciousness, and a science towards the limits; there is a good deal of overlap between the sections as the fundamental issues can be approached from a number of different angles. Two of his key original and connected insights relate to what Emilios calls pre-epistemology and self-locking objectification.

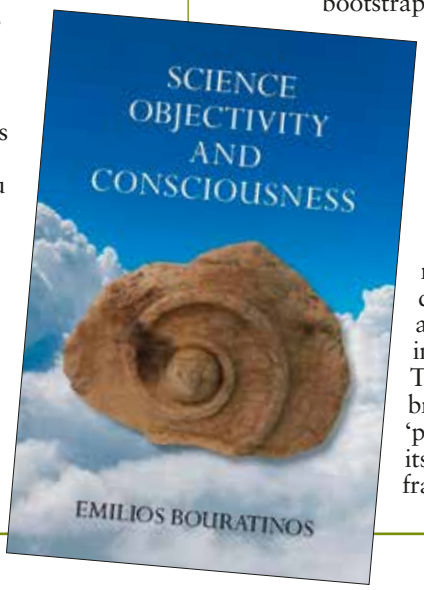
If epistemology is how we know things, then pre-epistemology 'is concerned with how we isolate, objectify and lock into our fundamental perceptions and conceptions' (p. 31). We easily mistake reality for the representations we make of it, taking an object-mediated approach for granted. Emilios recommends that we cultivate an awareness of this objectification process, which is where the self-reflective process comes in. He points out that 'conception is not possible without perception, perception is not possible without representation, and representation is not possible without objectification' (p. 205). One could add the necessary metaphorical nature of the thought process to this observation. Fundamentally, the investigating consciousness needs to investigate itself.

Readers will find their minds reformatted by many formulations in this profound discourse. Here are some examples of Emilios' reflexive bootstrap observations, which are like linguistic equations:

- there can be no examination of consciousness without a consciousness informing that examination
- the subtlety of understanding depends on the understanding of subtlety
- science can help us to better understand consciousness, but only to the extent that consciousness helps us first to better understand science
- you define in terms of what you think you know and you know in terms of what you think you can define
- consciousness can be understood in terms of facts only to the extent that facts can be understood in terms of consciousness
- if it is necessary that wholeness incorporate consciousness, should it not be equally necessary that consciousness incorporate wholeness?

Both right and left hemisphere thinking are required to understand these formulations, and the analysis here is informed by the equally subtle thinking of Iain McGilchrist. In one chapter, consciousness is defined as the fifth force, wholeness in action on its parts, the process whereby physical reality wraps itself into form and is thought into existence. This in turn is related to qualitative thinking, and there is an extraordinary 17-page chart of bullet points articulating the unfolding consciousness and the patterns we use to understand ourselves and the world. Language is also very important, all the more so in its evocative and even ambiguous function. At one point, Emilios quotes a translation of the first verse of the *Tao Te Ching*, which is usually rendered as 'the Tao which can be spoken of is not the real Tao; however, this translation is based on the either/or logic of the West, and a Chinese person from the classical period would understand the sentence as follows: 'the Tao which can be spoken of may, or may not, be the real Tao' (p. 116) Another related strand is both/and rather than this exclusive either/or. Emilios points out that nature 'equally uses wholeness and fragmentation, structure and process, linearity and nonlinearity, consistency and spontaneity. (p. 67).

Pointers to a self-reflective interdisciplinary science of consciousness can be found in 'relativity, quantum mechanics, Bohr's complementarity, Heisenberg's uncertainty, Goedel's meta-theorem, Chew's bootstrapping, complexity theory and fuzzy logic', all of which 'cry out for a new understanding of the physical world that is dependent on self reflection, multiform tea, direct experience and profound intuition' (p. 164) These scientific breakthroughs 'point way beyond its conceptual framework',



still largely based on mechanism and reductionism, frequently articulated in a scientism that is quite oblivious to its own philosophical underpinnings; and there is considerable resistance to findings that suggest the inadequacy of scientific materialism as an approach. Emilios comments that 'they honestly believe that they are not philosophising when they stipulate that "only" the tangible is real, "only" measurements can assess it, and "only" facts can describe it (p. 171). Later, he likens modern cognitive scientists and neurophysiologists to mediaeval schoolmen in their unquestioning belief: 'cognitive science and neurophysiology query everything - except their own fundamental assumptions', which are contextualised not only in terms of our thought processes but also more generally in cultural, philosophical, political and educational terms.

The last chapter is devoted to suggestions for a way forward regarding the development of a self-reflective interdisciplinary science of consciousness. How do we train ourselves in wholeness and transform our own sensibilities? One important method is a Bohmian type of silence-punctuated dialogue in which presuppositions and assumptions are suspended and egos kept out of the exchange. This will allow wholeness and new insights to emerge spontaneously from the collective intelligence. You can read more detail on this in the article beginning on page 15. The next step cannot be taken starting from where we currently are: 'using a closed science to investigate a restricted consciousness will not help us use consciousness to open up that closed science' (p. 254). Rather, we need what he calls a pattern approach focusing on complex interactions, realising that 'the quality and level of our conceptual apparatus influences the scope of our insights…we are as we perceive' (p. 170) The implications of the approach recommended could not be more far-reaching as they probe the very basis of our thinking as it has been translated into the world we live in, and anticipated results will be de-artificialising intelligence, rehumanising technology, and re-personalising society so that we can ask ourselves what is real quality in life.

Readers will be richly rewarded by careful study of this philosophical and scientific *tour de force* - the fruit of a lifetime's reflection and conversation - and it is sure to count among the most defining and significant books of the decade.

THE EXPLANATORY POWER OF PANSPIRITISM

David Lorimer

SPIRITUAL SCIENCE

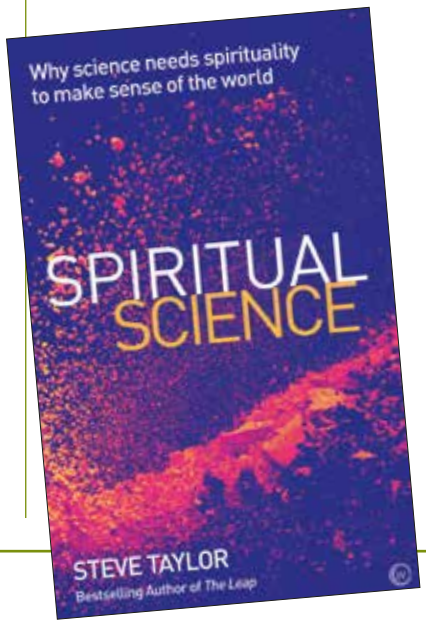
Steve Taylor (SMN)

Watkins, 2018, 264 pp., £12.99, p/b – ISBN 978-1-78678-158-1

When asked about this book, the author stated that it was an attempt to write a more popular version of *Irreducible Mind*. In this lucid and wide-ranging discussion, Steve demonstrates that the explanatory power of scientific materialism is severely limited when it comes to explaining consciousness, psi and mystical experiences. As readers of this journal will be aware, materialism is the academic orthodoxy, for psychologists, philosophers and neuroscientists, based on the belief that human consciousness is produced by the brain, and ends with death. As Steve observes, scientism or scientific materialism has become so intertwined with science that most scientists do not know the difference, and conflate the two, thus creating an equation between rational, scientific and material, a process championed by TH Huxley in the 19th century. Those who question this assumption are liable to be excommunicated in terms of finding their career options, grant funding and publication possibilities restricted. Here, both psychology and sociology play a part in the politics of knowledge. Steve explains how this situation has come about historically, culturally and psychologically. He also spells out 10 tenets of materialism in the first chapter.

Instead of this view, Steve proposes a post-materialist philosophy of panspiritism, whereby consciousness is a fundamental feature of the universe. This spiritual force can also be understood as a universal consciousness in which we all participate, a oneness implying interconnectedness, empathy and altruism rather than separation associated with exploitation and domination of the natural world (p. 53). Later in the book, he spells out the corresponding tenets of panspiritism. Using this approach, Steve addresses the whole range of phenomena involving consciousness, mind and brain, including the hard problem, the placebo effect, neuroplasticity, self-healing, near death experiences, telepathy, precognition, psychokinesis, children who remember previous lives, mystical experience and remote viewing. He reviews the evidence and shows how panspiritism can provide a more coherent and adequate explanation of these well attested phenomena.

He discusses the nature of evolution, criticising orthodox neo-Darwinism and discussing recent views put forward by Thomas Nagel. He postulates that evolution is 'driven by the innate tendency of consciousness to expand and intensify itself', citing parallels with other thinkers such as Teilhard de Chardin and emphasising the inner aspect of the process. He highlights the mutual and co-operative nature of evolution, referring to Darwin's 'web of complex relations' and the mutualism of Kropotkin. He concludes that all living beings are interconnected as expressions of the same spiritual force and that 'to believe that the process of evolution is accidental is as illogical as interpreting human development from embryo to adulthood as a random process' (p. 191). He then moves on to discuss the 'puzzle of altruism' for proponents of the selfish gene, arguing that altruism and cooperation are in fact more innate than competition and aggression and that empathy is the root of pure altruism. Here he might have mentioned my own concept of 'empathetic resonance' developed in my book *Whole in One*, recently



republished as *Resonant Mind*. I also postulate that empathy is rooted in the oneness of life and consciousness and the capacity we have to enter into the subjective experience of others, from which I derive an ethic of interconnectedness. I agree entirely with his argument that altruism is the basis of empathy and that we are expressions of the same consciousness, sharing the same essence.

The following chapter investigates the implications of quantum physics for the interpretation of psi phenomena. As many people have also remarked, including Rupert Sheldrake, quantum physics undermined the basic principles of materialism 80 years ago, but this does not seem to have registered, especially with biologists. Dean Radin has argued in a number of books that psi represents macroscopic entanglement, and Steve quotes late Network Member Count Olivier Costa de Beauregard as saying that "relativistic quantum mechanics is a conceptual scheme where phenomena such as psychokinesis or telepathy, far from being irrational, should, on the contrary, be expected as very rational" (p. 163). In spite of this, many scientists repeat the mantra that the existence of psi threatens to undermine the basis of science; what is undermined is not so much science as scientism as a belief system.

As readers can see in this current issue, the Network has just published the Galileo Commission Report, *Towards a Post-Materialist Science*. The reason we chose Galileo was because he invited his contemporaries to look through the telescope, but Aristotelians and some Church dignitaries were reluctant to do so as it undermined their existing worldview. Steve rightly observes that there are parallels with our time, and that the more fundamentalist materialists react to evidence for psi unscientifically with closed-mindedness and hostility; heretics are punished (Rupert Sheldrake is a classic example) and unwelcome evidence is ignored, explained away or suppressed. However, this evidence will not go away, and the philosophy of materialism is in the process of being superseded on rational and evidence-based grounds. Steve makes a convincing case for the intellectual and moral superiority of his panspiritist approach that 'helps us transcend our sense of separateness so that we can experience our connectedness with nature and other living beings' (p. 232). He has written a brilliant and eloquent book that is essential reading for our times.

LOOKING THROUGH THE TELESCOPE

David Lorimer

AN END TO UPSIDE DOWN THINKING

Mark Gober (www.markgober.com)

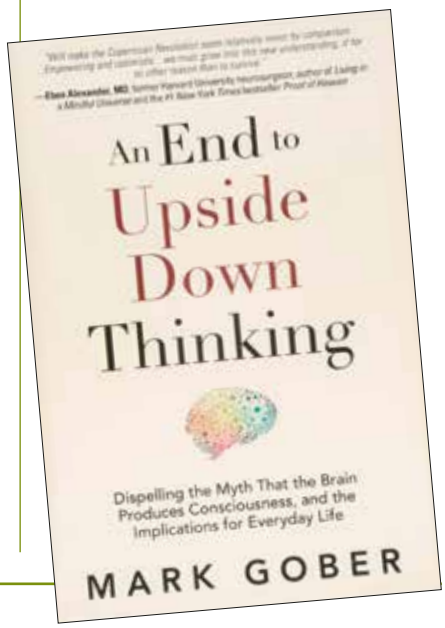
Waterside Press, 2018, 314 pp., $19.95, p/b – ISBN 978-1-947637-85-6

Speaking about this book at our meeting in Italy, Mark gave a riveting talk summarising his thesis that the idea that the brain produces consciousness is in fact a myth, and our thinking about mind and body needs to inverted, hence the title. Mark's background is in fact investment banking, and he tells the story of how he became interested in consciousness and began in the summer of 2016 listening to podcasts and reading literature on psi. This contradicted everything he thought and had learned, but he was struck by the fact that individuals he studied were independently arriving at similar conclusions, suggesting that consciousness is much more fundamental than generally recognised in scientific circles. It gradually dawned on him that materialism is in fact an unverifiable belief system. His book is exactly how he describes it, namely a comprehensive summary of the field written for a general audience.

Mark invites readers to consider two contrasting frameworks or perspectives, where the first is based on matter, and the second on consciousness, which he illustrates in corresponding diagrams. He asks why sceptics should not be sceptical about their own belief system, and points out that the basic tenet of materialism is an inference or leap of faith. He introduces the reader to a summary of his findings and also to the nature of resistance to these same findings. I think that a lot of this resistance has to do with perceived internal self-consistency or consilience based on materialistic premises. He summarises this debate in a two-column table where sceptics like Sean Carroll state that current physics rules out ESP for ever and Lawrence Krauss claims that there is no scientific evidence for extrasensory perception. Against this, Mark quotes Dean Radin's recent book where he shows that experiments on remote viewing, telepathy, precognition and psychokinesis have achieved six sigma statistical results under controlled experimental conditions - so the odds against chance are over 1 billion to one. Against this, it is clear that Carroll and Krauss are simply ignorant and prejudiced, however distinguished as scientists.

The next two chapters analyse the unproven assumption that the brain creates consciousness and the proven and accepted science of quantum physics that defies common sense. The third part reviews the scientific evidence for remote viewing, telepathy, precognition, psychic abilities in animals and psychokinesis, covering some of the same ground as Steve Taylor above. He includes findings from the CIA Stargate project released in 2017. He then moves on to near death experiences, communications with the deceased, and children's memories of previous lives as evidence for survival and reincarnation. Much of this will be familiar to seasoned readers, but it is covered very clearly and thoroughly, with excellent chapter summaries at the end.

In the final part, Mark asks how can this be, and what does it mean – could mainstream science actually be so wrong? Here he uses a simple question and answer format, summarising the previous chapters and characterising the brain as a self-localisation of consciousness.



Moreover, and counterintuitively from a materialistic perspective, 'when the brain is less active, the filter is less strong, which allows for a broader spectrum of consciousness to be received', including in cases of terminal lucidity (p. 217). He rightly asserts that conclusions should be based on evidence rather than belief and suggests four possibilities with respect to the research he has been covering: either the scientists are lying, delusional, using poor scientific or statistical methods, or they are correct. If one is to uphold any of the first three possibilities, then evidence needs to be produced to back such accusations. Comprehensive reviews such as those by Dr Jessica Utts, President of the American Statistical Association, conclude that such robust effects would no longer be questioned in mainstream domains. Even Nobel laureates like Brian Josephson come under attack - he was actually disinvited from a conference owing to his research interest in ESP. This is a good example of an observation quoted from Bernard Haisch that 'facts can be overturned by evidence, whereas dogma is impervious to evidence.'

The last chapter discusses the implications of this new view for everyday life. As I also argue in my own books, this extended understanding of consciousness indicates a deeper meaning to life and either the primacy of consciousness or a theory whereby mind and matter emerge from a deeper implicate order. This is not panpsychism, an increasingly popular option, whereby matter has consciousness. Mark quotes insights from David Hawkins, Rupert Spira, Anita Moorjani, Nassim Haramein and Eben Alexander, inviting the reader to conduct a thought experiment in relation to consciousness and our experience of space and time. He concludes that 'I' is unlimited, self-aware, infinite and eternal, the one universal mind expressing itself through many centres, as New Thought thinkers were formulating 100 years ago. Mark reaches the same conclusion as Steve, namely the primacy of oneness and interconnectedness over finiteness and separateness, a belief that he identifies as the core symptom of virtually every contemporary problem. This is a highly informative, well-argued and engaging read, a valuable contribution to the emerging post-materialist worldview.

ECOLOGY-FUTURES STUDIES

RESPONSIBLE INNOVATION

David Lorimer

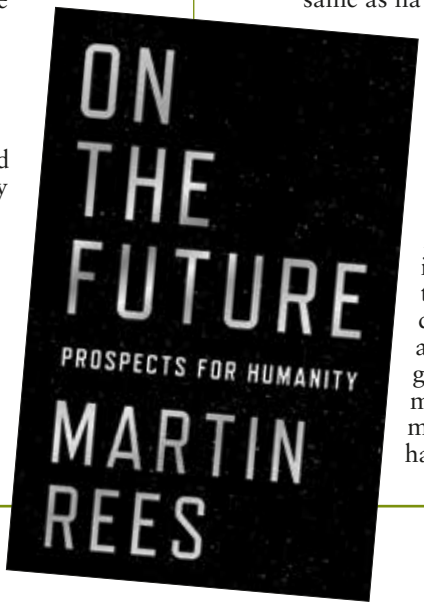
ON THE FUTURE

Martin Rees

Princeton, 2018, 256 pp., £14.99, h/b –ISBN 978-0-691-18044-1

EF Schumacher famously remarked that humanity is now too clever to survive without wisdom, an observation I am sure Martin Rees would agree with in the light of his concise, measured and balanced assessment of our future prospects. Some readers will be familiar with his earlier book *Our Final Century?* published about 15 years ago, around the time I first met him. As Astronomer Royal and a former President of the Royal Society, Rees writes as a scientist, but also as a citizen 'and as a worried member of the human species' Space-Ship Earth: 'its passengers are anxious and fractious. The life-support system is vulnerable to disruption and breakdowns. But there is too little planning, too little horizon scanning, too little awareness of long-term risks. It would be shameful if we bequeathed to future generations a depleted and hazardous world' (p. 227).

The book ranges over all the main scientific, technological and planetary issues and challenges that we face collectively. In all fields covered - nuclear threats, eco-threats, climate change, clean energy, biotech, cyber technology, robotics, AI, space travel, cryonics and others - the key is how to balance technological advances with wise applications underpinned by values, which science itself cannot provide. Rees gives many examples of areas where a lone rogue could wreak havoc, for instance with an engineered virus. Humans are such that a combination of greed and curiosity is likely to mean that ethical boundaries will be crossed by someone somewhere. This also highlights the importance of an informed public and corresponding widespread debate on key ethical concerns, for instance assisted dying, now legal in some European countries, in the light of expensive technology able to keep people alive with almost zero quality of life.



Rees is well aware that our systems and focus on short-term thinking and results limit our capacity to address our collective challenges for the benefit of future generations. He quotes Jean-Claude Juncker as saying that "We all know what to do; we just don't know how to get re-elected after we've done it." (p. 28) Although this remark was made in relation to the financial crisis, it applies *a fortiori* to environmental challenges, leading Rees to observe that there is a depressing gap between what could be done and what actually happens; as in other areas of life, the important is trumped by the urgent. Hence the need for fundamental reform of governance structures, but again the inertia of our existing systems and attitudes militates against this. Rees rightly notes that regulations can help will not gain traction until the public mind set changes. One hopeful possibility is that developing nations may in some respects bypass the high-energy high consumption stage through which Europe and the US have passed.

A discussion of machine intelligence opens up a whole other range of issues referred to in my review of *The AI Delusion* below. There is a danger of slipping from the metaphorical into the literal when using terms such as intelligence and learning. Rees is aware of this when he writes that it is difficult to instil common sense and understanding into AI, and that autonomous robots might have competence without comprehension: 'being able to compute something is not the same as having an insightful comprehension of it' (p. 192). However, he immediately goes on to write about machines surpassing human intelligence in such a way that they could design and assemble a new generation of even more intelligent machines. One has to ask in this

context exactly what is meant by intelligence, which seems to me closer to left hemisphere analysis than right hemisphere intuitive understanding of wholeness and connections. Rees goes on to speculate that a combination of genetic modification and cyborg technology might mark a transition to 'fully inorganic intelligences', partly driven by space travel, and that it is likely that these 'inorganics' will eventually gain dominance. He envisages a post-human or transhumanist future (an expression he does not use) with a long-term future line with electronic rather than organic 'life', which is not life as we know it or humans as we define them.

This in raises the question of the very nature of the human being and in turn the nature of reality. He writes that 'our current concept of physical reality could be as constricted, in relation to the whole, as the perspective of the Earth available to a plankton whose universe is a spoonful of water.' (p. 184) He then asks if our brains are matched to an understanding of all key features of reality. Here his own perspective is basically naturalistic. He does not believe in God, describing himself culturally as an unbelieving Christian, and in this respect he is critical of the new atheist concentration formed religious dogma. The deeper question relates to ways of knowing and the exploration of inner rather than outer space. Mystics of all ages and traditions insist that there is a spiritual reality transcending the physical and that our true purpose is union with the divine; this can be known and experienced through gnosis rather than reason or sensory means. They also speak of the intelligence of the heart manifest in love and empathy.

The final chapter brings the threads together and contains some useful observations on the scientific approach, which Rees says cannot be identified as a distinctive procedure, asserting that 'it would be truer to say that scientists follow the same rational style of reasoning as lawyers or detectives in categorising phenomena and assessing evidence' (p. 202). He also comments that scientists pay too little regard to philosophy, but taking reincarnation as his example of a 'theory that can be adjusted to fit any eventuality' is unfortunate, as he is clearly unfamiliar with the painstaking research by Ian Stevenson on children remember previous lives; Stevenson was scrupulous in drawing cautious conclusions from his data and only spoke of a balance of probability with respect to various possible interpretations.

Overall, this is a wise and humane overview of the challenges we all face, with much practical guidance about how best to tackle these in terms of responsible scientific and technological innovation related to deeper human values. Perhaps the most important implication is the need to prioritise the future instead of the immediate present, with a cabinet level Minister in every national government responsible for bringing this longer term perspective. There is in fact plenty of good thinking already going on to draw on.

ON THE EVOLUTIONARY EDGE OF THE TRANSFORMOCENE

David Lorimer

THE VISIONARY SPIRIT

Mick Collins (SMN)

Permanent Publications, 2018, 256 pp., £18.95, p/b – ISBN 978-1-85623-315-6

This is the sequel to the author's *The Unselfish Spirit* of 2014 and is subtitled 'awakening to the imaginal realm in the Transformocene Age' - an apposite neologism for the times in which we live and proposing an existential mutation of the Anthropocene. The book itself is a transformational tour de force inviting readers to expand their ways of knowing beyond hyper-rationalist scientism and reconnect with the neglected and hidden imaginal realm through dreams, visions and synchronicity. This is all more important, since our predominant paradigm has repressed other ways of knowing embodied in the mythic, the sacred feminine and in indigenous traditions.

The book is very clearly structured in three parts: the imginal lineage, covering a critique of hyper-rational and epistemologically arrogant scientism, the mythic journey including the story of Parmenides, the sacred feminine, also in relation to the Earth, and what he calls eco-imaginal energies embodied in the relational worldview of indigenous cultures. The second part is entitled the redemptive quest, and deals with the global crisis in relation to the unexamined shadow as well as more generally with the nature of evil (we see the shadow every day on the news); also the thought experiment that we are all future ancestors, and working with the daimon – like Jung - towards a life of *eudaemonia*. The third part - the emancipatory edge - investigates the significance of the life review in the near death experience, Jung's active imagination in relation to imaginative action, the interaction between what he calls daimonic fate and angelic destiny, and finally 'the spiritual art of *wu wu*' - this is a nice transformation of the generic scientistic dismissal 'woo woo' to a new version of the traditional Chinese concept of *wu wei* representing work with least effort. *Wu wu* 'leads to a dynamic equilibrium between stillness and movement, where we are connected in wholeness to our ways of doing-being' (p. 243)

We often need to reach a crisis point before we ask more profound questions. The speed of modern life uproots us from the inner depths of the soul, distracting us with endless trivial diversions, so that we do not often hear life speaking to us from within and in synchronicities, of which Mick gives many personal examples, including some from his clients. Perhaps none is more telling than the synchronicity between a parade in Berlin for Mussolini and a lecture by Jung on the same day, especially given the theme of the shadow. The din of the procession was so great that Jung was obliged to stop speaking. When he could once again make himself heard, he remarked that 'world history and just passed beneath the window'. Mick also describes a very special synchronicity on a visit to Jung's Bollingen Tower on the shore of Lake Zürich.

Mick gives readers the tools, not only through his exposition but also in practical reflections and exercises (especially pp. 259-60), to make a personal contribution to this redemptive quest by engaging in shadow work, recognising human moral evil in

ecocide, and accessing the daimon within in order to move beyond the cult of individual satisfaction to a 'more profound culture of collective awakening' (p. 253). His work is one of re-imagination, deepening and sacralising our relationship to nature. Importantly, he recognises the need to integrate the transpersonal with the transhuman in technologies of transformation that go beyond the robotic to a deep soul connection. This theme will become increasingly important, as Martin Rees also highlights in his recent book reviewed on this issue. It probes the very nature of the human being and reality, and the contrast between the terms transpersonal and transhuman highlights this. Manipulative instrumentalism must be kept in check by ethical review and deep reflection on human values.

It is clear that our overall human challenges are unprecedented and that our institutions are inadequate and unfit for purpose. As Mick inspiringly suggests, it is possible for each of us to exercise our visionary and redemptive capacities in the necessary passage through the birth canal from the Anthropocene to the Transformocene, an intense process of rebirth. Here we can become rainbow warriors: 'we can all play our part in a *vision quest* that awakens our visionary energies and connects us to a *visionary spirit*. This is the mythic actuality that gives birth to the Transformocene Age, which is ours to co-create. It starts *right here, right now* as love in action' (p. 261). This means being aware of the collective dimension of our individual lives and actions in this overall process of co-creation through more conscious, soulful and relational living.

GENERAL

FREEDOM TO DOMINATE

David Lorimer

THE AMERICAN TRAJECTORY – DIVINE OR DEMONIC?

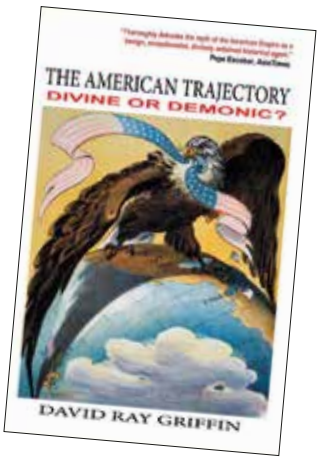
David Ray Griffin

Clarity Press Inc, 2018,
409 pp., $29.95, p/b –
ISBN 978-0-998694-795

This penetrating analysis constitutes the background or 'prequel' to David's book *Bush and Cheney: How they Ruined America and the World,* reviewed in No 126 in April (p. 53) and puts one in mind of the bumper sticker stating 'Be kind to America, or else we will bring you freedom and democracy.' The starting point is the self-image of the US as exceptional, moral and a force for good, unlike previous empires. This rhetoric is still asserted within the political mainstream, for instance by President Obama (responsible for an extension of illegal US drone attacks) when he stated that "I believe in American exceptionalism with every fibre of my being." However, Griffin also reports an interview by President Trump talking about Putin when he asks, "What, you think our country is so innocent?" provoking a rebuke from the New York Times for 'drawing a moral equivalency between the United States and Russia.'

Replete with historical examples, Griffin shows the gap between moral rhetoric and practical politics and the indissoluble link between militarism and imperialism – America has 700 bases throughout the world. The overall thrust of the argument is that the trajectory of American foreign policy 'has been more malign than benign, more demonic than divine' (p. 31). Beginning with an analysis of the elimination of Native Americans (whose population by 1890 had been reduced by 95% from 10 million to 228,000) he proceeds to describe interventions in the Philippines, Cuba and Hawaii, brutal invasions that are portrayed to the public as benevolent assimilation. The original ideals of freedom, self-determination and democracy are ignored when there is a conflict between liberty and profit or self-interest, the latter always prevailing, while the former continue to be used rhetorically for propaganda purposes. In practical political terms this is encapsulated in the so-called Monroe Doctrine where the US arrogates to itself a natural right to control the Western hemisphere and, through an 'open door' policy, to promote its own political and economic advantage.

There are striking and interesting parallels between US policy in World Wars I and II, between Wilson and Roosevelt. Griffin explains how Wilson, aided and abetted by Churchill, deceived the US people by claiming that he wanted to keep America out of the war 'while doing everything possible to get into the war.' The



key incident was the sinking of the Lusitania, and Griffin's analysis shows that the ship was deliberately endangered and was carrying highly explosive material, so that when it was hit by a German U-boat, it sank in 18 minutes, resulting in 128 American deaths; 'a flame of indignation' swept the country (c.f. 9/11) and enabled Wilson to argue that Germany had forced America to enter the war (there is further fascinating material on the detailed policies calculated to provoke Germany).

Roosevelt engaged in a similar deceptive strategy during World War II. He engineered a strategy to put Japan in the wrong, using the US fleet in Hawaii as bait to tempt them to act. When the attack on Pearl Harbour occurred, it was not a surprise to the US administration, but the officers in charge, Admiral Kimmel and Captain Short, knew nothing in advance; and when 'on December 7 Washington received the information about the exact minute of the attack several hours in advance, General Marshall sent this information to Hawaii in such a way that it would arrive only after the attack had begun' (p. 146). Perhaps the most disgraceful aspect of this incident is the deliberate cover-up and the discrediting the officers, much of whose testimony was omitted from the official report. Worse still, they were inundated with hate mail and called traitors, while other witnesses were intimidated into reversing their testimony, with one even thrown into a psychiatric ward and being told that "his testimony had better change or he'd be in the ward for the rest of his life" (p. 148). So it is obvious that the US administration of the time simply lied for political purposes. The officers were eventually exonerated (but only long after their deaths).

The chapter on Hiroshima and Nagasaki shows how the decision to drop the atomic bomb was political-diplomatic rather than

military. Already by 1943, the government had decided that the bomb would be used on Japan rather than Germany, having learned that the Germans had given up their attempt to create one. Roosevelt was told that if the bombs were not produced and used, the Manhattan Project 'would be subjected to relentless investigation and criticism'. Its real military purpose was to subdue the Soviets, but the result was the nuclear arms race. Truman knew that the Japanese would never agree to surrender unconditionally, whereby the Emperor would be removed and tried for war crimes. As one historian put it, Truman needed Japan's refusal to justify the use of the atom bomb. The fact that dropping the bomb was not militarily essential makes its use morally indefensible as a brazen demonstration of power, and even George Kennan regarded this as 'an indignity of monstrous proportions.' Griffin asks rhetorically if America can still regard itself as 'exceptionally moral' after such an incident.

The CIA was created in 1947 to 'promote freedom' through covert operations, of which many examples are given, for instance in Iran, installing the Shah in a military coup against popular will and propping up a dictatorial and repressive regime. This historical background explains a great deal about the attitudes of Iran towards the US. It turns out that, in the name of resisting communism (defined as totalitarian) the US government lent support to authoritarian governments opposed to communism, but who also oppressed their people. George Humphrey is quoted as saying (p. 223) that the National Security Council should stop talking so much about democracy and instead "support dictatorships of the right if their policies are pro-American". In both Cuba and Brazil, a policy of neutral nationalism was thought to be threatening to US commercial interests, and, in the case of Cuba, this drove Castro into communism. In Brazil in 1961, the CIA spent millions of dollars supporting candidates opposing President Goulart and engineered his removal in a coup, after which the American ambassador remarked that it was "the single most important victory for freedom in the hemisphere in recent years"; the CIA clarified that the change "will create a greatly improved climate for private investment" (p. 229), thus revealing the underlying motive. The net result was that this March 31 Revolution, 'said to be necessary to prevent a *possible* left-wing dictatorship, ushered in an *actual* right-wing military dictatorship that, besides lasting for two decades, was especially brutal.'

Further chapters detail coups, campaigns, false flag operations and wars in Greece, Italy, Korea, the Philippines, Guatemala, the Dominican Republic, Iraq, Indonesia and of course Vietnam, to which a whole chapter is devoted. This was ultimately about US potency and credibility while also avoiding a domino effect in south-east Asia. One memo from John McNaughton at the Department for Defence (elsewhere referred to as the Department for Projecting Power!) stated that 70% of the aim was to avoid a humiliating US defeat affecting their reputation as a guarantor, 20% to keep South Vietnam territory from Chinese hands, and only 10% to permit the people of South Vietnam to enjoy a better, freer way of life - these figures speak for themselves, and there is an additional aim 'to emerge from crisis without unacceptable taint from the methods used.' This aim was certainly not achieved, with the dropping of 100 million tonnes of herbicides and countless tons of napalm bombs, all resulting in up to 4 million Vietnamese casualties along with 700,000 Cambodians and 58,000 American troops. Senator Wayne Morse remarked in 1967 that the US was going to become guilty of being the greatest threat to the peace of the world.

I will select one final theme among many others that might be raised: the failure of the League of Nations and the United Nations to achieve the stated aims. In 1883, my great-grandfather James Lorimer, a Scottish legal philosopher and Professor of international law at Edinburgh published his magnum opus: *The Institutes of the Law of Nations*.

I have his copy with the printer's bill still inside. Griffin devotes a page to his work where he proposed that 'disarmament would not occur without the prior creation of an international government with the necessary military forces to provide security.' This international government would be the guardian of the freedom of all national governments. In the cases of both the LN and the UN, the great powers wanted to preserve the right, as Rousseau had put it, 'of being unjust when they please', perpetuating a system of international anarchy based on national self-interest. Then the U.S. Senate did not allow the country to join the League. The UN is often accused of being ineffective, but Griffin shows that 'it is ineffective primarily because it was intended to be so by its architects, the primary architect having been United States itself', which naturally wanted to preserve its right to intervene for reasons of self-interest in the affairs of other countries, whether overtly or covertly. Hence a historian's conclusion quoted in the book that 'the protection of their own sovereignty and freedom of action seemed more important to them than permanent peace.' This is still the case, and one wonders when humanity will reach a sufficient degree of collective maturity to reorganise international affairs for the good of the planet and the whole body politic. In this respect, please refer to my review of Nicholas Hagger's books in the last issue.

The penultimate chapter analyses the US drive for global hegemony, even in terms of what is known as Full Spectrum Dominance, implying the weaponisation of space currently ongoing. Policy documents supporting this drive have been developed since the 1992 Pentagon publication entitled Defence Planning Guidance where, according to Paul Wolfowitz 'calculations of power and self-interest rather than altruism and ideals provide the proper basis for framing strategy' (p. 364). These thoughts were further developed by the Project for the New American Century (PNAC), whose members recommended the removal of Saddam Hussein as early as 1998. The implementation of their foreign policy recommendations required a New Pearl Harbour, which occurred on September 11, 2001, and which is the subject of many other books by Griffin, previously reviewed in these pages. The 2002 National Security Strategy dangerously recommends pre-emptive action against emerging threats before they are fully formed.

I have only been able to include a proportion of the evidence adduced in this study, but sufficient to indicate the upholding of Griffin's thesis that American exceptionalism in the sense that the US is morally superior to other countries is conclusively proved false. This does not excuse in any way similar behaviour by other countries, but the book is a major and necessary corrective to a self-righteous and ill-informed interpretation of US history and foreign policy. It is much better explained in terms of naked political and commercial self-interest than by the accompanying rhetoric of noble altruism in the name of freedom and democracy.

TRACING A FORGOTTEN EXPLORER

Michael Tobert

DEEPER THAN INDIGO

Jenny Balfour Paul

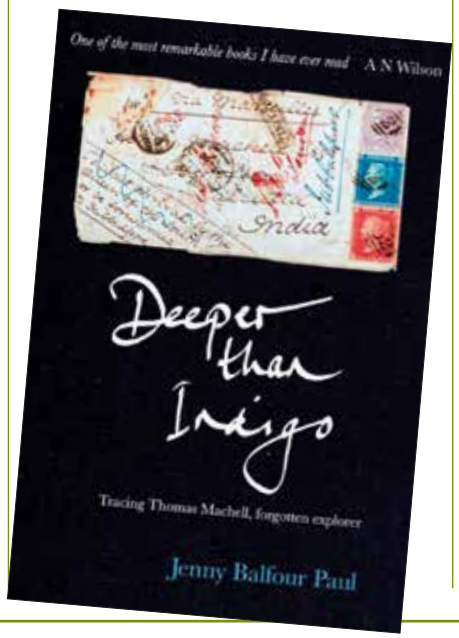
Medina Publishing, 2015,
320 pp., £9.95, p/b –
ISBN 978-1909339-56-9

Deeper than Indigo is two stories. Primarily it's the story of Thomas Machell, an indigo planter (among other things), who kicked around India (among other places) between1824 and 1862. Secondarily, it's the story of Jenny Balfour Paul, the author and an expert on indigo, who is still very much with us. The particular interest for members of the Scientific and Medical Network, and the reason for this review, is the connection between Thomas and Jenny, and specifically whether their connection goes beyond the usual and natural connection between a researcher and her subject.

Thomas Machell was nothing if not restless. At 12, he climbed out of the bedroom window of his family house in Beverley, Yorkshire, with his younger brother in tow, and made it as far as Brighton. At 16, he worked his passage out to India and then to China where he played a minor part in the First Opium War, witnessing the signing of the Treaty of Nanking. From there he sailed around Cape Horn on a ship carrying coal to the Marquesas Islands in the South Seas, where he fell in love with the daughter of a Chief. Happiness seemed, for the only time in his life, a possibility but he chose instead to live an unsettled, unusual and lonely life working indigo in Bengal, coffee in Kerala and bullock transport in the interior, as well as travelling solo up the Indus to the Northwest Frontier and joining – as the only foreigner – Arab merchants taking cargo by dhow from Calcutta to Suez.

Machell, an observer and outsider, watched the Raj as if from a distance, as if part of it, but not part of it. He didn't regard it as a blessing. He didn't take the view, which was in part at least engendered by the Enlightenment, that western culture was inherently superior. In his opinion, '*The white man is not the regenerator but the annihilator of the uncivilized races, he brings no blessings to the savage*.' He was sympathetic to the natives. He became fluent in Arabic, Hindi and Bengali and often dressed as the locals dressed, all of which makes him sympathetic to modern eyes and something of a throwback to the earlier days of the East India Company when a degree of assimilation was not considered exceptional.

Jenny Balfour Paul came across Machell through his writings in the British Library and fell for him. She begins the book; '*I first met Thomas at the very end of the 20th century. The attraction was instant, and when I parted from him in London, I felt physically sick*.' When she visited his family home in 2000, she wrote, '*As I began to walk slowly up the drive this morning, I felt strangely choked up. The house was still hidden behind trees. Then suddenly I glimpsed it through a gap in the trees and, absolutely unexpectedly, the very moment I saw it I was engulfed by such an overwhelming depth of feeling that I found myself sobbing uncontrollably. It's hard to describe but the emotion seemed to come from somewhere else, as if my reaction on seeing that house – almost 'returning' to it – wasn't mine. It was much more than a sensation of sadness, it was an overpowering sense of loss such as I have never experienced in my own lifetime*.' When she saw the façade of the house for the first time, '*I pointed to the upper right-hand window and out of my mouth came the words, "That was Thomas's bedroom – he climbed out of that window when he ran away."*'



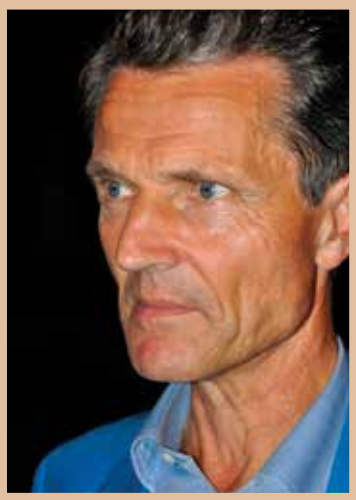
There is much more of this 'remembering' throughout the book. Balfour Paul follows Machell through thick and thin and her adventures, both before and after discovering the journals, – getting herself smuggled into Oman, being shot at in Yemen, travelling beyond where few researchers would dare to go – are an absorbing read in their own right. Coincidences between her life and Machell's abound. She undertakes a past-life regression in which Machell talks to her and she to him, a conversation that continues even when she's not lying in a dark room at the back of a tea-planter's house in India's Malabar Hills where her regression sessions take place. She fills in missing parts of his chronicles with her own intuition, parts of which are subsequently confirmed by her own research. And so the book winds and weaves between the two of them as they share history, travels, anecdotes and past experience.

Does this all add up to evidence of a reincarnated spirit? Balfour Paul herself plays this down but the connection between the two of them centuries apart – whatever may be the precise nature of that connection – is real enough. It's a rollicking read and, for those who like their intimations of immortality off the beaten track, not to be missed.

***Michael Tobert** is author of **Karna's Wheel** and **Cryptogram** –*

see www.michaeltobertbooks.com

Books in Brief



David Lorimer
Note: many of these books are now available in downloadable electronic form

SCIENCE-PHILOSOPHY OF SCIENCE

Consciousness Demystified

Todd E. Feinberg and Jon M. Mallat

Princeton 2018, 199 pp., £20, h/b.

After *Consciousness Explained* comes *Consciousness Demystified* based on a model of neurobiological naturalism related to the ideas of John Searle but based in evolution and neuroscience and asserting that there is no need to invoke any new, unknown forces to account for the way the brain creates consciousness. The book presents a sophisticated analysis using the three principles of life, neural features and a natural explanation of the subject-object barrier. The authors distinguish and define three forms of subjective awareness: exteroceptive, interoceptive and affective, each with multiple explanatory gaps which they in turn categorise into four neuro-ontologically subjective features – referral, mental unity, mental causation and qualia. They then run through the evolutionary development of mental images and affects in a variety of vertebrate consciousness, all of which makes fascinating reading and affirms the adaptive function of consciousness.

The final chapter addresses the naturalisation of subjectivity, which is the crunch of the argument and highlights special neurological features unique to conscious brains. The authors then address the four gaps referred to above, asserting that 'qualia cannot be dissociated from life processes in general (p. 112). They formulate two forms of irreducibility – auto-ontological from the subjective pole and allo-ontological for the outside observer. Qualia are therefore both neurobiologically unique and exclusively first person so there are two aspects that should not be collapsed into one as in standard discussions of the hard problem.

Does this elegant formulation demystify consciousness? Well, within its scope it makes a valuable contribution, but no mention is made of evidence for consciousness beyond the brain or non-locality that might require an extension of their naturalism or a consideration of the fundamental nature of mind or consciousness – 'top down' as well as bottom up. And here Tim Freke's ideas on the evolution of the soul might be germane in seeking consistency within an account of the evolution of consciousness and its expressions towards greater depth and complexity.

The AI Delusion

Gary Smith

Oxford 2018, 249 pp., £20, h/b.

This refreshing, amusing and frank book dispels many myths about the nature of AI when compared with human intelligence, with a stimulating range of examples. The introduction shows how Barack Obama successfully used data mining in his 2008 presidential campaign, while Hillary Clinton's approach failed in 2016, partly by not applying common sense and trusting the selective findings of an algorithm with notable blind spots. As the cover states upfront: 'while computers are very good at discovering patterns in data, they are useless at judging how best to apply them in the real world because they lack human wisdom and common sense.' They are obedient rather than intelligent and do not understand meaning. The author draws a revealing parallel between computer functioning and the feat of Nigel Richards who memorised the 386,000 words of French Scrabble and won the French language Scrabble World Championship despite not understanding a word of French! So computers are more useful than intelligent, despite well-publicised examples of beating world champion board game players. As the author points out, 'computers do not know what words mean because

computers do not experience the world the way we do… they do not have the common sense or wisdom that humans accumulate by living life.' (p. 236)

A further crucial point also illustrated with many telling examples concerns the limits of data mining in view of the fact that when statistical models analyse large number of potential explanatory variables, the number of possible relationships not only becomes astonishingly large, but, invariably, some random combinations will be correlated with what we are trying to predict, thus tempting analysts into seeing real rather than artificial patterns. In one case, the author manufactured a blood pressure study based on random variables, which still showed up significant patterns – of course, these also apply to real-world studies, so one should be cautious about drawing conclusions or mistaking coincidence and correlation for causation. The same applies to forecasting stock-market performance. Algorithms are frequently used in the process of job applications but again, real human judgement has to have the last word. Overall, the book is a cautionary tale delimiting the strengths and limitations of computer analysis.

Timefulness

Marcia Bjornerud

Princeton 2018, 208 pp., £20, h/b.

The title of this thoughtful book indicates the necessity of an awareness of the Earth's temporal rhythms for our planetary survival – thinking about time like a geologist. A key insight is the overlapping rates of change – think of mountain building as in millions of years compared with the rhythms of the oceans and the atmosphere. The Anthropocene era recognises the human impact on the biosphere - the last time CO2 levels were over 400 ppm was 4 million years ago. The author encourages us to give up the illusion that we are outside nature when in reality we are entirely embedded 'in a much older, more powerful world whose constancy we take for granted.' As others have also observed, the rate of technological progress creates a wisdom gap, 'and we lack both the appetite and political economic infrastructure for intergenerational action. (p. 167). It is tempting to think that we can geo-engineer our way out of global warming but, as the author indicates, this is fraught with danger (p. 155), and she doesn't seem to realise that experiments are already underway, although systematically denied by every government (see www.geoengineeringwatch.com). The suggestion mooted by Kurt Vonnegut to appoint a Secretary for the Future is an excellent one as a counterweight to our current short-term obsession.

Theology and the Scientific Imagination

Amos Funkenstein

Princeton 2018 (first edition 1986), 421 pp., £35, p/b.

This dense book covers the transition period between the mediaeval world of theology to the modern world of science and the continuities maintained between the two in terms of secular theology relating particularly to God's omnipresence, Divine omnipotence and laws of nature, and Divine providence and the course of history. The author analyses the reworking of these themes where 'science, philosophy and theology are almost one and the same occupation' – an interesting connection was first made in the 1930s by the Catholic philosopher Etienne Gilson in tracing the origins of modern scientism to mediaeval nominalism, and one can see how scientism is in fact a modern form of secular theology. Protestantism contributed to this process of secularisation through the disenchantment of nature that accompanied the rise of mechanistic philosophy. In addition, we see the birth of 'the ideal of a system of our entire knowledge founded on one method' with its accompanying monocausality, which would have been a methodological sin for Aristotle. The sheer amount of detail in the book makes it more suitable for historians and philosophers of science, although general readers interested in the field will gain considerable insight from this classic work.

MEDICINE-HEALTH

Yoga for Mental Health

Edited by Heather Mason and Kelly Birch

Handspring Publishing 2018, 214 pp., £35, p/b.

This is a timely and very well-informed volume building on the increased use of yoga for mental and physical health as well as its considerable growth in popularity over the last few years – in the US, 2012 figures indicate that 20.4 million people were practising yoga, while the 2016 figure was 36 million. At the same time, Western societies face unprecedented levels of mental health challenges, to which yoga can evidently make an effective and economical contribution. While the book is primarily aimed at mental health professionals interested in yoga interventions, it can profitably be read by those more generally interested in yoga and its evolving integrative approach. The editors point out in their introduction that yoga has its very basis in mental health in the widest sense, incidentally promoting well-being while also a path to Enlightenment.

Research indicates many beneficial effects, for instance on the nervous system, but also in the practice of mindfulness during postures. There are specific chapters on anxiety, depression, ADHD, insomnia, trauma, eating disorders, schizophrenia, and children and adolescents, followed by a final consideration of future directions. Each individual chapter contains an overview, potential approaches, research studies, the rationale for using yoga in relation to the particular condition, and recommendations for practice. Some chapters also have very useful tables describing potential interventions. There is then a comprehensive list of references at the end of each chapter – here again, there was a threefold increase in yoga research from 2004 to 2013, but much still remains to be done. This is surely a landmark volume in the field.

Core Light Healing

Barbara Ann Brennan

Hay House 2017, 204 pp., (large format), £20, p/b.

Some readers may be familiar with Barbara Ann's previous books, and I think this one is the most comprehensive and impressive, updating as it does her previous work. Although she is best known as a healer, Brennan began as a physicist and meteorologist working at NASA until she realised that she was more interested in inner than outer space and trained in body psychotherapy while developing her own high sense perception so as to observe the energy field or consciousness system of her clients. From there she has developed her own extensive system described in this book. She describes the creative process originating in 'the black

velvet void of undifferentiated life within us' which can be shaped and manifested through intention. There are extensive quotations from an intelligence called Heyoan channelling through Barbara exhibiting, in my view, an extraordinary wisdom: '*the divine universe is a reciprocating universe. It is benign. It responds to your flowing creative current by becoming a co-creator with you*' - so we are responsible for directing this source energy through its various phases.

The book describes various ways to heal blocked creative energies and untangle your life before moving on to 'fourth level reality'. Here I found her description of the physics of this realm quite remarkable, with 27 major aspects highlighted that mature spiritual seekers will immediately apprehend. The lower worlds are characterised by extreme duality, and Barbara gives advice on how to handle these dimensions and negative intentions, as well as discussing past life healing, dying and life after death. She gives a number of examples from her own experience, including around the death of her father and how she saw him come into the room shortly afterwards accompanied by his sister and mother. The final chapter consists of inspiring and illuminating concepts from the Heyoan intelligence on world peace, healing, evolution and transformation through alignment with our deep purpose. There is much to meditate on and work with here.

Luminous Life

Jacob Israel Liberman with Gina and Erik Liberman

New World Library 2018, 214 pp., $15.95, p/b.

Jacob Liberman spoke at our Mystics and Scientists conference on light in 1992 – this is his latest articulation of his life's work with light, beginning with his career as an optometrist. His most important concept is presence, as we understand how light guides our lives. In a technical sense, Jacob explains that it is not about thinking or trying to be here now, but 'a naturally occurring state that arises when our eyes and mind, triggered by light, focus on the same place at the same time.... in an intricate dance of aiming, focusing, tracking and teaming' - note the congruence here of eyes and mind. He writes that the intelligence of life is constantly directing us towards presence and indicating our responsibility in terms of what catches our eye as the next logical thing to do, and, importantly, to complete, as we understand the connection between light, vision and consciousness.

The chapters describe different aspects of Jacob's work, with some fascinating case histories and healing stories. On one occasion he feels a sharp pain in his heart while taking a shower and immediately knows that his mentor Elliot has died, so he rings through straight away to find out that this has indeed just occurred. Besides the sun and outer light, Jacob also discusses the inner life of dreams and consciousness as pure awareness, reflecting that in an important sense we do not live life, life lives us and we feel in alignment, in a state of flow, in the zone. This is due to the fact that 'the navigational system within us is inseparable from that which animates everything in the universe' (p. 87). Jacob gives some useful practical exercises involving breath and visualisation, which I have already tried out. He suggests that we can learn from how the roots of trees deal with obstacles by inserting and embracing them, thus ultimately strengthening their foundation. At the end, he returns to the practice of presence – attending to whatever enters our awareness and taking care of things as soon as we can: 'do what you love, love what you do and the world will come to you (p. 175). We can acquire a sense of knowing that is also a surrender to not knowing 'which allows true wisdom to reveal itself', as readers of this fine and literally illuminating book will discover for themselves.

Unlocking your Self-Healing Potential

Josef Ulrich

Floris Books 2018, 272 pp., £12.99, p/b

Subtitled 'a journey back to health through creativity, authenticity and self-determination', this wise, compassionate and beautifully illustrated book gives readers physical, psychological and spiritual resources to face the challenges of illness, especially cancer. He recognises the insight of Sir William Osler in commenting that it is as important to know what kind of patient has the disease as what kind of disease the patient has, as each of us is different, especially in our attitudes. The author suggests that a good starting point is our threefold relationship with ourselves, others and the universe or God, which he illustrates with useful diagrams. He highlights the paradox of material abundance and increasing ill-health – including mental – encouraging us to call upon the inner physician, who already knows how to heal. Imagination is a key faculty, as is the healing power of love and looking for light in the darkness as well as a strong sense of autonomy and authenticity. We also need to learn how to trust, handle negative feelings, find meaning in our illness and overcome inner resistance as we navigate our unique healing path. A highly recommended source of guidance and inspiration based on long clinical experience.

PHILOSOPHY-SPIRITUALITY

How to be Free

Epictetus, translated by A.A. Long

Princeton 2018, 173 pp., £13.99, h/b.

The Stoic philosopher Epictetus lived from 55 to 135 A.D. and began life as a slave. One can therefore appreciate his central tenet that mental freedom based on control of the mind is the highest good, as also noted by Victor Frankl in Auschwitz. By not only accepting but welcoming every event, one can achieve peace of mind. Epictetus distinguishes carefully between what is up to us, namely our attitude, and the events and circumstances independent of us. He recommends turning inwards and asking ourselves what resources we have to deal with circumstances as they arise, advising people to behave as you would at a banquet, taking a portion and allowing the dish to pass on. Surprisingly, he advocates temperance, not only in appetites, but also in conversation. And if someone speaks ill of you, you should think that there are many things besides what they say that they do not know about you - moreover, this is just their opinion. To be free is to be self-sufficient in his view, so a person making progress is characterised by 'criticising nobody, praising nobody, blaming nobody, accusing nobody, and saying nothing about oneself to indicate being someone or knowing something.'

How to be a Friend

Marcus Tullius Cicero, translated by Philip Freeman

Princeton 2018, 188 pp., £13.99, h/b.

Originally written in 44 BC, the advice in this book is as timely as ever, perhaps even more so in view of the changing nature of friendship to include the online dimension. We are advised to choose our friends with care, to make new friends but keep the old, and that without friends, life is not worth living - friendship is a necessity of life. I like to remember the advice of Samuel Johnson who said that we should keep our friendships in constant repair. The busyness of modern life makes this all the more relevant. Cicero reminds us never to ask a friend to do anything shameful and never to do anything shameful if asked. However, we should be able to give and receive criticism in a gracious manner. He observes that true friendships are rare among those holding political office and takes the view that we should love after we have judged rather than judging after we have loved. One of the last sections – 102 – reflects: 'since human affairs are fragile and fleeting, we should always be seeking someone to love and be loved by in return. For if affection and goodwill disappear from life, so does all joy.'

The Beginnings of Philosophy in Greece

Maria Michela Sassi

Princeton 2018, 209 pp., £24, h/b.

One of my treasured books is *Early Greek Philosophy*, by John Burnet, which I bought in 1974 - it was inscribed in Latin by the author, who was Professor of Greek at St Andrews University in the 1890s. It is a measure of how far scholarship has progressed to read the subtle contextual analysis of this book and its understanding of the various currents of thought as well as intellectual diversity and geographical factors that led to the emergence of what we now call the pre-Socratic. Aristotle emerges as central in a classificatory and historical process, and the author draws on comprehensive scholarship pioneered by such figures as Francis Cornford and Walter Burkert. Readers will come away with a much more nuanced understanding of the origins of philosophy in Greece and the many contributing factors. The author discusses specific thinkers such as Thales, Hesiod, Anaximander, Parmenides, Empedocles and Heraclitus, as well as the development of the idea of the soul and its many interpretations. In every case, progress is made by critical thinking questioning traditional viewpoints, which is still true today.

Lights along the Path of Life

Beinsa Douno

Evera Books 2018, 117 pp., $19.95, p/b from Amazon.

Woman – The Source of Life

Beinsa Douno

Bialo Bratsvo, 2010, 79 pp., p/b, no price given.

As many readers will know, I have been following the teachings of Beinsa Douno (Peter Deunov) for over 30 years, and my introduction to his work *Prophet for our Times* was republished in 2015. The first book has been compiled and translated by Antoaneta Krushevska and Maria Braikova and consists of 99 inspiring stories and parables, which I have been reading in the mornings for a few weeks. I have extracted one or two as fillers in this issue. They are arranged according to the nine archetypal colour rays discussed in his *Testament of the Colour Rays of Light*, which compiles biblical verses to correspond with colours and qualities, and which I use every day – today is Thursday, and the colour is blue corresponding to truth. As the editors observe, these stories offer practical advice and gems of wisdom verified in life, and as such I can't recommend them highly enough as lights along the path, as the title suggests.

The second book is truly prophetic in terms of the emerging role of women in the world, coming as it does from thoughts expressed nearly a hundred years ago and articulating the feminine principle symbolised by love and compassion. Douno's diagnosis is that present-day society exhibits the subjugation of women to men, and that women must now be uplifted – 'the salvation of the world lies in the uplifting of women', also in terms of the abolition of war. Here he notes that this will not be achieved unless all women unite, as also suggested by the Dalai Lama. He writes about the importance of the mental, emotional and spiritual state of the women during pregnancy, saying that they must be placed in the best conditions, beginning the education of the child in the womb. In his talks, he always comes back to the central importance of love and wisdom working together so that we can move forward in truth - this is an inspiring compilation.

Art and Spiritual Experience

David Greenwood

Gracewing 2018, 246 pp., £14.99, p/b.

David Greenwood is an engineer and theologian who has been involved in the Alister Hardy Trust researching religious and spiritual experience, especially in relation to art – here he explores how works of art and particularly landscapes in the romantic period can trigger an awareness of the transcendental. He begins with an interesting analysis of the development of aesthetics in Germany with Kant, Schiller, Hegel and Schelling, moving on to the less well-known but important figures of Runge and Carus. He uses a framework developed by Michael Podro, especially his criterion that the artist 'engages with the state of mind of the viewer to achieve an elevated state or heightened emotional response to the work of art which may suggest a transcendence that lies behind the objects depicted' (p. 7) Goethe's science of participation and contemplation is mentioned in this respect but arguably deserves more extensive treatment. In addition to art, the author refers to significant music, including that of Bach, and I can endorse his suggestion that elevated states can be touched here, recalling Bach's Passacaglia in King's College Chapel and his Dorian fugue in Notre Dame de Paris.

After a discussion of the ideas of Rudolf Otto, William James and others, the author embarks on his main task of examining the life, background and representative paintings of Samuel Palmer and Caspar David Friedrich – here we encounter a major drawback that, apart from Friedrich's Wanderer above the Sea of Fog depicted on the front cover, there are no illustrations of the paintings covered, not even in black and white. The diligent reader will have to source these on the internet while reading. The approach is captured in a quotation from Schlegel: 'the universe we can neither explain nor conceive, but only contemplate and reveal' (p. 89) – this is knowledge of Schelling's intellectual intuition, and the complementary perspectives of rational and intuitive are extensively treated by Iain McGilchrist, whose work does not feature in the

bibliography. There is no doubt, as the author suggests and elaborates – for instance with icons – that art can be sacramental, as also experienced by Paul Tillich, Michael Ramsey and John McQuarrie. This book is a significant interdisciplinary contribution to the relationship between art and spiritual experience.

Being Spiritual but not Religious

Edited by William B. Parsons

Routledge 2018, 280 pp., £105, h/b, e-book from £17.50.

Regrettably, Routledge continues to apply its policy of overpricing its hardback books, unlike Oxford University Press, so that only libraries can afford the hardback. You may be wondering why it says e-book from £17.50 – this is new to me as there is now the possibility of renting the e-book for six months for that price, during which time one could of course read it, a better solution for students. Given developments in the field of spirituality, this is an important volume as the proportion of people classifying themselves as SBNR continues to grow, and in the US this is at least 18% while some polls show figures as high as 30%. The volume is broadly structured to look at roots - for instance death of God theology, Buddhism and mindfulness - then a survey of current trends including belief patterns and commercial exploitation; finally, a look at emerging trends for the future.

Among the most interesting contributions are those from Linda Mercadante, Elaine Howard Ecklund, Jason Kelly and Jorge Ferrer with William Vickery. Mercadante is author of an important text on the subject (reviewed by Oliver Robinson in a previous issue) and has conducted extensive interviews. She puts the percentage of non-religious 'nones' in the US at 25% and rising to over 30 million people; of these, she calculates that 40% are in the SBNR category in which she distinguishes five types: dissenters, casuals, spiritual explorers, seekers and 'immigrants'. Many people have rejected traditional ideas of God and sin and favour a more immanent than transcendent approach. Ecklund has conducted the most exhaustive surveys of spirituality among scientists, and here the most interesting distinctions come between countries – so in Taiwan scientist tended to reserve their traditions, in France they reject supernatural but care for the human world, while in the UK and the US they are just affiliated from religion but retain a value system. Jason Kelly discusses the ecology of cosmic consciousness with reference to Walt Whitman, RM Bucke and Edward Carpenter. Interestingly, Carpenter draws an ethical conclusion with political implications from his mystical experience. Jorge Ferrer charts the significance of experientialism in transpersonal psychology and the evolution from perennialism to participation. The book is a highly informative one for those interested in the field, so I would recommend renting it on the terms described above.

Why We Need Religion

Stephen T. Asma

Oxford 2018, 255 pp., £20, h/b.

The author is a professor of philosophy at Columbia College in Chicago who has also been a visiting professor at the Buddhist Institute in Cambodia. The book is subtitled 'an agnostic celebration of spiritual emotions' and is partly a response to the exclusively cognitive focus of many new atheist writers and the fact that science does not directly address our emotional lives. The author confesses that he used to write in this vein himself, for instance in *Skeptical Inquirer*, and one sees the residue of this position in his dismissal of any metaphysical notion of the soul, preferring instead to speak of 'soul talk' in metaphorical terms. Anatomically, emotions are represented by the limbic system, and the heart of the book is that religion helps people manage their emotional lives and may have a therapeutic function – we all appreciate the importance of how we feel emotionally. Thus he takes a broadly functionalist approach to religion, mentioning in passing the 'fictionalist' stance of pretending things are true for social reasons (religion can also be important as a social glue).

A series of chapters discuss a range of emotions and human challenges: sorrow, death and emotional management; forgiveness, shame and guilt; mental training for peace, resilience and sacrifice; ecstasy joy and play; and finally managing fear and rage. The author brings in a Buddhist perspective on a number of occasions, for example relating to impermanence and death. Religion has an adaptive function in relation to managing emotions, although it can also have a repressive function, as in sexuality. In the final chapter on fear and rage, he argues that religious and extremist terrorism are due mainly to resentment rather than religion per se, and that many religions also promote tolerance and humanism. This is a refreshing interdisciplinary take on an important issue.

The Task of Philosophy in the Anthropocene

Edited by Richard Polt and Jon Wittrock

Rowman and Littlefield 2018, 225 pp.,£90, h/b (eBook £29.95).

This volume seeks to answer the question implicit in the title given our unprecedented situation characterised by the geological era of the Anthropocene. Quite a number of contributions echo Karl Jaspers' notion of the Axial Age as the root of a Western tradition articulating both immanence and transcendence. Our own era may well be a Post-Axial Age when viewed historically. The contributions are very diverse with some new formulations like 'environmental cosmopolitanism', the 'Hubriscene' (one can understand that one) and the 'liquidation of the real' where nature is liquidated into resources, property into wealth and truth into information; the legend of Faust comes to mind and we cannot assume by any stretch that 'scientific ingenuity is coextensive with wisdom', especially when it comes to transhumanist ambitions.

The pioneering eco-philosopher Henryk Skolimowski would have had his own response to the question, but will certainly have sympathised with the notion of Shared Dwelling put forward by Michael Marder in his essay; also the need to think deeply so as to extricate ourselves from a cultural rut and philosophy out of its academic backwater. Another essay points out the parallels between ecological and ontological finitude and vulnerabilities, advocating 'radical hope' and poetic imagination in response to the breakdown of a world. My favourite essay was the final one by Thomas Alexander articulating four voices of nature and what he calls a polyphonic conception of philosophy. He understands the centrality of an ecological outlook and redefines naturalism as one who cares for nature and humanism as care for humans, hence a different kind of humanistic naturalism; he contrasts this with the 'monophonic extreme of reductive materialism – a scientistic

attitude in which the humanistic, ontological, and transcendental voices are dismissed' (p. 197). What we now need is an interactive field of polyphonic voices. He sees transcendence through gnosis as a form of self-realisation, 'an expansion of perspective and understanding that allows a reinterpretation of the ordinary' (p. 207).

Western Philosophy Made Easy

Dennis Waite

iff Books (John Hunt) 2018, 103 pp., £6.99, p/b.

Dennis Waite is the author of many books on Advaita, and here he provides an excellent and concise introduction to Western philosophy in a mere 100 pages. It is interesting that, like quite a few of us including myself, his philosophical journey included the course run by the School of Economic Science, where non-dual Advaita underpins the approach. He also introduces philosophical counselling on the basis that many people who read books on philosophy are dissatisfied with their lives. He explains the main branches of the discipline before considering key philosophers from the Pre-Socratics onwards. He then moves on to consider some central issues – morality, free will, believe and consciousness. His own view is that we do not have free will, being largely driven by habit, but he does not frame the issue in terms of carefully weighing up alternatives before making a considered decision. So far as consciousness is concerned, he thinks that it is intrinsically closed to science and that the brain is a medium through which Consciousness manifests. We know it because we are it, and without it nothing can be known. In his conclusion, the author introduces Advaita in more detail, commenting that, for him, it provides the answers that Western philosophy has not.

The Year of Our Lord 1943

Alan Jacobs

Oxford 2018, 256 pp., $29.95.

This is an interesting book about Christian humanism in an age of crisis, specifically during the Second World War. It features five Christian intellectuals – Jacques Maritain, T.S. Eliot, C.S. Lewis, W.H. Auden and Simone Weil (I'm not sure she would entirely accept this label) tracking their thoughts and writings during the Second World War as they struggled with deeper cultural issues and the role of Christianity in renewing democracy and defining the human being in relation to technology, the personal to the impersonal. The sense of humanism here embraces the contribution of philosophy, literature and the arts, with the individual dialectic between faith and doubt. There is a very good contextual analysis of Eliot's Four Quartets and in-depth treatment of the later writings of Simone Weil. I was particularly interested in her essay 'The Romanesque Renaissance' about the role of the Languedoc culture in the 13th century, ruthlessly eliminated by the Albigensian Crusade. She thinks that the Church made a serious error in choosing force over love and abandoning peaceful coexistence. The author concludes that the diagnostic powers of these five thinkers were very considerable in analysing 'the means by which technocracy had arisen and the damage it had inflicted' but without being able to propose an implementable solution when the cultural influence of Christianity itself emerged diminished from the War.

Creator and Creators

Roza and Margarita Riakkenen

Axis Mundi Books (John Hunt) 2018, 199 pp., £14.99, p/b.

This is an important and comprehensive work synthesising spiritual philosophy and science and written by a mother and daughter. Among the key sources are Madame Blavatsky, the Agni Yoga of Helena Roerich, a Russian text new to me called *The Fire of Kalagia* and the story of some Russian prisoners calling themselves X7 which I remember reading with Sir George Trevelyan 30 years ago. The book is worthy of careful study as it deals with the most profound questions relating to the nature of life. One key postulate is that Spirit shapes matter by thought and that the process of life is a return to unity. The process of manifestation is holographic and archetypes include not only geometrical shapes but also dynamic spirals moving through the three worlds of existence – the fiery, the fine or subtle and the solid. Archetypes also include colour and tone, all vibrational, while the fundamental purpose of the human is co-creation on the basis of responsibility; this entails harmony. There are chapters on the human body, the differentiation of universal consciousness, the nature of life and death and ways of shaping the future in terms of a road to unity overcoming the illusion of separateness. The authors make the important point that modern scientific discoveries allow researchers in metaphysics and spiritual philosophy to revise their ideas accordingly; also that our future is a manifestation of creative activity in terms of what we imagine, the goals we seek and the intention behind our thought as we endeavour to raise our vibrational frequency.

The Book of Freedom

Paul Selig

JP Tarcher 2018, 338 pp., $17, p/b.

This is the third in a trilogy of channelled books and conveys a powerful spiritual message, although I felt it could have been expressed in fewer pages. The core message is that we need to become aligned to and express our True Divine Self and see this essence in others, rather than coming from the smaller self with all its fears and also projecting this onto others. The True Self is the I Am, the Centre beyond all duality which has to be recognised, affirmed and expressed - it corresponds to the Kingdom. In this respect, there are powerful affirmations from this deep identity that is capable of creating and manifesting from another level. The level from which we manifest is in fact a conscious choice and we co-create the world through this process. So if we want to manifest a new world at a higher octave, then we ourselves must move to that level in freedom and resolve to serve the whole.

The Third Testament – Volume 5

Martinus

Martinus Institute 2018, 336 pp., h/b., no price given.

Martinus lived in Denmark from 1890 to 1981 and had an opening in 1921, which he describes in terms of becoming his own source of light and as a cosmic baptism of fire. He recorded his observations in a series of books over the next 60 years. This book is a translation of Volume 5 of his main work. For the general reader unfamiliar with his work, it would have been useful to have an introduction and also some kind of description on the back cover. The book plunges straight in at Chapter 14 with a densely expressed cosmology. It is impossible to cover more than a few points in a brief review, but two things struck me:

first, that the world structure is pure wisdom and love (as in Swedenborg and Deunov) expressing life and that all manifestation and matter constitute stages in a cycle: 'this cycle is entirely a mental movement from darkness to light, and from light to darkness, and from darkness back again to light, and so on continuously' (p. 43). This reminded me of a corresponding thought in Walter Russell with the continuous process of unfolding and refolding, radiation and gravity. Then there are some pertinent observations on morality and sexuality and the corresponding evolution of the human towards the more integrated types J and Christed K. This embodies the highest fire or sexual energy/bliss and light. At this level, the sexual organs 'are the very sensory instruments for the beings giving and receiving sympathy or for the creation of nothing less than the very highest physical and spiritual union or fusion of two beings' feeling of life into one common feeling. Here spirit merges with spirit… and they are one with God (p. 304). This is a true mystical sexuality rarely expressed in the West, but also with resonances to Swedenborg's ideas on conjugial love.

The Christian Middle Way

Robert M. Ellis

Christian Alternative (John Hunt) 2018, 307 pp., £17.99, p/n.

This wide-ranging study argues the case for Christian faith but against Christian belief with its absolutes and openness to intolerance rather than a provisional confidence accessible to experience. The Middle Way avoids extremes and presents a critical universalism that embraces uncertainty. The book draws on Jungian archetypes as well as the work on left and right hemisphere thinking developed by Iain McGilchrist while reminding readers that Christianity is essentially a religion of divine love. The left hemisphere is inclined towards rigid beliefs, while the right hemisphere understands holism and context. Christian agnosticism finds an outlet in the mystical tradition that transcends intellectual dogma and seeks integration. Christian history, however, is full of forks and divisions, which are explored in some detail. There are chapters on Jesus as an integrated teacher, Christ as the middle way, Christian practice, ethics and politics, as well as a stimulating discussion about modern atheism and the polarised debate where each side makes the critical points that they 'systematically over-interpret and fail to apply to their own position' so as to score points against the opposition. Many readers are likely to find themselves sympathetic to this embodied approach that also emphasises experience, uncertainty and integration – it is a mature reflection and a positive sign for the future.

The Book of Common Prayer – Texts of 1549, 1559 and 1662

Edited by Brian Cummings

Oxford 2011, 820 pp., £10.99, p/b

The Book of Common Prayer – A Very Short Introduction

Brian Cummings

Oxford 2018, 139 pp., £7.99, p/b.

Many of us were brought up on the Book of Common Prayer, and I think back fondly to the many winter evenings when I attended Evensong in Winchester Cathedral and felt reassured by being 'guarded from the perils and dangers of the night'. Both books give a fascinating insight into the editorial skills of Thomas Cranmer, the Archbishop of Canterbury centrally responsible for the book. The dates are significant, falling as they do during the reign of Edward VI, then Elizabeth I following the Catholic Mary and the return of Charles II after the Cromwell administration. The texts are faithful to the English of the day with what now seems quaint but rather delightful spelling. Interested readers should begin with the very short introduction which puts the work into a historical and liturgical context as well as explaining differing Protestant and Catholic opinions and how the Book was exported by the Empire. In the last 40 years, it has been largely replaced by more modern formats, although it remains present in parallel. It is fairly staggering to learn that it has been translated into nearly 200 languages and dialects and is still used every day in the USA.

PSYCHOLOGY/ CONSCIOUSNESS STUDIES

History of Modern Psychology

C.G Jung, edited by Ernst Falzeder

Princeton, 2018, 164 pp., £24, h/b.

These lectures given at the Swiss Federal Institute of Technology (ETH) in the academic year 1933 to 1934 are appearing in English for the first time, and this is the initial volume in a series of eight running up to 1941. The lectures are accompanied by extensive scholarly footnotes by the painstaking editors. This volume contains a general introduction setting the scene for these lectures including the founding of the psychology department at ETH in the 1890s. Jung's approach is interdisciplinary, covering biological, ethnic, medical, philosophical, cultural-historical and religious aspects. The authors had access to Jung's own notes as well as those of attendees, and we learn that his work runs to 100,000 pages and 35,000 letters. The editors note that Jung was undoubtedly the most historically and philosophically minded of psychologists in his generation, which comes out clearly in the erudition displayed in the lectures.

I found it impressive that Jung refers with equal facility to the history of philosophy and psychology in French, German and British thought - in the specific introduction, the editor refers to previous histories of psychology and explains the uniqueness of Jung's approach, which includes extensive treatment of cases from spiritualism and mediumship. In France, he mentions the impact of La Mettrie's 'L'Homme Machine', developed further by Condillac and expressed in the prevalence of the mechanistic metaphor. Each lecture is preceded by answers to submitted questions, and it is amusing to find that one attendee commented that they were too popular!

As well as famous names, many lesser thinkers are referred to and the reader gains a good understanding of the development of various currents of thought. Five lectures are devoted to the phenomenology of cases from Jerome Kerner and Theodore Flournoy, then, towards the end, he introduces a fascinating series of diagrams characterising inward and outward facing of human psychic

function, which I had not seen in other work. One of these deals with the polarities between light and unity on one hand and dark and plurality on the other. On page 126, he provides a schema which he subsequently applies in discussing a number of historical characters, including Rockefeller, Goethe and Nietzsche. Not surprisingly, perhaps, Goethe emerges as the most balanced and integrated: 'nothing human was strange to him'. Jung also comments on the imbalance within the culture, which is still the case with our predominant orientation towards the outer and analytical thinking, although he also observes that 'every point of view has an inner logic, and is a reality.' (p. 138) This important new series of volumes will be of interest not only to Jung scholars, but also to the wider public as so much of his diagnosis still stands today.

Embracing Life

David "Lucky" Goff PhD

ICRL Press 2018, 314 pp., $19.95, p/b (Kindle $9.99).

Subtitled 'toward a psychology of interdependence', this book is a valuable contribution to the unfolding story of connectedness with its concomitant ethical implications. The author had a stroke in 2003, which radically altered his life and gave him a new experience and awareness of the betweenness of things and the importance of relationships. His perspective is that we are extensions of Life itself, part of its web, the pattern that connects. The discussion is framed within the evolutionary process of synergetic relationships and emphasises the importance of understanding Arthur Koestler's idea of the holon, further developed by Ken Wilber, which represents a balance between autonomy and integration. This moves naturally onto a discussion of the psychology of interdependence and what the author calls sociotherapy, the capacity we have to open up in community through dialogue.

What he calls the social koan calls us to move through diversity to interdependence in a process of transformative learning. We find ourselves in a 'developmental impasse' demanding new forms of behaviour and relationship – only last night I was watching an interview demonstrating the logical necessity for transformation in our social relationships given our technology and exponential impact on the planet; together these create a risk of self-termination. We need to overcome our intolerance of otherness and move from one aspect of Darwinism represented by survival of the fittest to the other, relatively neglected until recently, individuality in relationship represented by symbiosis and synergy – 'the survival of fitting in'.

Life Crisis

Catherine G. Lucas

Sheldon 2018, 95 pp., £7.99, p/b.

A very helpful book explaining the mindful way to address and overcome life crises, where a pearl may grow from the grit in the oyster so that the crisis may eventually come to be seen as an opportunity for healing and change. The author draws on her own experience and that of others as founder of the UK Spiritual Crisis Network. She draws useful distinction between unavoidable 'primary suffering' that forms part of the human condition and over which we have no control and 'secondary suffering' characterised by resistance and arguing with reality. It is here that mindfulness can be a valuable tool. The author explains the background of mindfulness as well as the growing body of research evidence supporting its efficacy. The second part introduces mindfulness practices including presence, self compassion, being in our bodies, grouping with physical pain or overwhelming fear and slowing things down while surrendering to the process. The author gives many useful practices that can profitably be followed – a good book to buy and pass on to those in immediate need.

The Intimacy of Consciousness Exploration and Transpersonal Psychotherapy – Coming Home

Edited by Ingo B. Jahrsetz, Regina U. Hess, Judith Miller and Rainer Pervoeltz

Cambridge Scholars Press 2018, 170 pp., £24.99, p/b.

This is an unusual book initiated by a team of transpersonal psychotherapists and spiritual teachers who decided to write about their experiences of coming home, a phrase which, of course, has many meanings and connotations. Some years ago, I reviewed book by John Moriarty called *Nostos,* the Greek for homecoming. The authors describe their own journeys and processes, working through fears, encountering silence and stillness, learning to trust and surrender, cultivating mindful presence, opening to healing, being in the flow. In a time of alienation, the idea of coming home or feeling at home is critical in emotional and spiritual terms. A key issue is how we deal with change, not only in the phases of life, but also in our relationships, where Jaya Herbst highlights the importance of recognising and working with growth impulses characteristic of life itself. Then there is an extraordinary account by Regina Hess describing her near death experience during the Asian tsunami and the voice she heard saying "I am not against you, I am with you" as she experiences 'a deep sense of homecoming after my rebirth out of the tsunami's womb.' Quite a number of contributions speak about coming home to God, and in Dietrich Franke's case he is helped by some texts from St John of the Cross. Altogether a rewarding read to accompany and illuminate readers on their own spiritual paths.

The Happiness Fantasy

Carl Cederstrom

Polity 2018, 167 pp., £12.99, p/b.

The author – a professor in the Stockholm Business School – takes a critical look at the origins and development of what he calls the current 'happiness fantasy' embodying the (masculine) American dream of authenticity and self-mastery through will-power and disciplined effort. Although he traces its origins to Huxley on human potential and Reich on sexuality and pleasure, he could also have mentioned the New Thought movement in terms of creative imagination, and existentialism for authenticity. There is much interesting material on Reich and his influence, including his relationship with Freud.

Major themes include narcissism, the appropriation of the happiness fantasy by corporations, the role of drugs both recreational and clinical, and the alpha male right to pleasure, epitomised in Berlusconi and Trump. Other figures discussed include Fritz Perls and Werner Erhard with their emphasis on emotional freedom and rejection of authority figures. Cederstrom rightly observes that the philosophy of Epicurus is about simple pleasures rather than excess, as every pleasure can be killed by overindulgence – the human organism eventually rejects it as with the man at Frenchman's Cove

in Jamaica who aimed to drink his weight in champagne... Although he is not mentioned, Cederstrom's ideas on happiness have something in common with those of Richard Layard, and are critical of overemphasis on individualism. He suggests instead that a new happiness fantasy should go beyond the personal and be based on empathy and even vulnerability – a more feminine and concerned vision.

The Brain, the Mind and the Person Within

Mark Cosgrove

Kregel Academic 2018, 180 pp., $18.99, p/b.

The title of this book indicates its main argument, namely that the brain is not equivalent to the person, either psychologically or philosophically. The author brings his Christianity into the centre of his argument, observing that the Old Testament view defines the person as matter and spirit fused together (thus eschewing the dualism of Eccles, even though he is quoted) and believing that we survive death to be resurrected in new bodies and brains - though nowhere does he specify how this might come about, relying as it does on 'the authority of inspired scripture'. The body of the book is a good and thorough analysis of brain, mind and self, covering issues such as the hard problem, free will, God spots, neuro-technologies and robots, with many references to significant books in the field. The author is right to comment on the loss of the personal in the study of the brain and to observe that the materialistic assumptions of modern neuroscience can lead to circular reasoning whereby they can only think in terms of material explanations (to label is not to explain) and find it difficult to deal with ultimate questions involving value, purpose and significance. However, he mistakenly limits radical empiricism to behaviourism, without mentioning the much wider view of William James. He does cover near death experiences, but does not draw any significant conclusions or refer to other evidence pointing to survival. The strength of the book lies in its insistence on the integrity of the human person in modern neuroscience and philosophy, but only evangelical Christians will be able to accept his overall framework.

Harmonic Resolutions 12

Daniel Stone

Circle Press 2018, 295 pp., £17.99, p/b.

This visionary interdisciplinary book takes the reader on a journey towards harmonic resonance through the meaning of numbers and the cyclical 12-sided medicine wheel. The author has lived in the desert of Mexico since 2000, and his work is informed by shamanic Toltec traditions. The introduction explains the universal significance of the number 12, and the body of the book is divided into four sections, each starting with zero and moving through the wheel – spirituality, science, business and work, and the human body. The author invites the reader to begin with the most appealing section, which may not be the first, or to read it in parallel so that one can come to understand the significance of, say, 2, in all four domains.

I chose to read the book in the sequence written, beginning with the powerful chapter on the spirituality, which also incorporates the message in poetic form. Readers are encouraged to open up, trust, surrender to the process, release, dance, remember freedom and wisdom, open the heart, face wounds, hold the centre, walk the tightrope, express their truth and recognise a sense of destiny in the face of death. This is powerful stuff. The 12 tones are beautifully illustrated in the middle of the book. The section on science is informed by wide reading and highlights the relationship between intuition and reason as well as the significance of the hologram and the process of creation and dissolution. At the end of this section, there is a practical explanation of ways of seeing and levels of attention. The next perspective is business and work, exploring themes such as vision, intent, growth, innovation, form, efficiency, taking stock and responding to change; this section also contains a practical series of steps. Finally, we come to the human body and healing, highlighting 12 systems of body functions. The journey is in pairs from shoulder joints down to feet, meditating on the nature of physical incarnation and the journey it implies towards freedom and universality, integrating many dimensions. I felt it would have been useful to have had a final epilogue bringing some strands together, but then each section is in fact self-contained. Interested readers can consult www.12consciousdreamers.com.

Engaging the Anomalous

Jack Hunter

August Night (White Crow) Books 2018, 235 pp., £14.99, p/b.

The author of this stimulating volume is the founder of Paranthropology, a journal that he has been publishing since 2010 and, as indicated in the title, dealing with anthropological approaches to the paranormal. The articles cover the anthropological context of anomalous experiences and the fact that they should be taken seriously, spirits, mediumship, altered states of consciousness and a series of interviews with other researchers. One of the central issues is the ontological status of the phenomena discussed, which do not fit in with orthodox scientific materialism with its 'hegemonic dismissal of alternative beliefs systems as necessarily unfounded and irrational'. In this respect, the author advocates a 'model agnosticism'. He also relates a revealing incident where an aggressive sceptic on an editorial board forced the publishers to withdraw his article because in a different context he had presented information that supported the claim to the ontological reality of supernatural phenomena. This was regarded as absolutely unacceptable and is a good illustration of the taboo of taking the paranormal seriously even as a possibility within academia - a totally unscientific and closed minded approach. By contrast, this book opens up some valuable avenues for consideration.

ECOLOGY/FUTURES STUDIES

WEconomy

Craig Kielburger, Holly Branson and Marc Kielburger

Wiley 2018, 324 pp., $35, h/b.

Some readers may the familiar with the work of Craig Kielburger, who initiated his charity Free the Children when he was only 12, and soon found himself meeting Prime Ministers and religious leaders to garner support for his cause. Since then, along with his brother Marc, he has gone from strength to strength with his WE Charity having lifted 1 million people out of poverty, and with his brother founding ME to WE Social Enterprise to drive

social change while also organising together the amazing WE Days, two of which I have attended at Wembley with over 12,000 young people. Then Dr Holly Branson now works for the Virgin Group having initially trained as a doctor.

This highly readable book helps readers find a sense of purpose and meaning, with ways of making a living while changing the world. The book begins with the personal journeys of the authors, moving on to business as a force for good and purpose as profitable for people and planet. This is followed by a number of chapters with specific business suggestions, then how to go about finding your cause and building a purpose-led learning organisation. The book is very well set out with significant charts of inspiring figures and many case examples. A relatively new notion is that of the 'intrapreneur', people who try to build a new culture and initiatives within their existing organisations. The authors are living proof that a sense of purpose, vision, an action plan and effective networking and marketing can work wonders, and the great strength of the book is the inspirational energy that literally jumps from the pages and invites the reader to greater fulfilment by becoming part of the WEconomy themselves - a sizzling read!

A Call to Action - Making Sense of the Chaos

Bobbie Stevens PhD

Balboa Press 2017, 140 pp., $14.99, p/b.

I met the author recently at our conference in Italy – she has doctorates in both psychology and business management, and this book arises out of her own life experience through applying a set of simple universal principles. The first part focuses on the one incorrect belief that underlies our myriad problems, namely that we are separate from each other, and therefore have separate interests. This is reinforced by pervasive fear. However, we exist in both inner and outer worlds and in the process of growth and evolution we come to realise that power is within. The core of the book lies in three principles or realisations:

1) Everything in existence is Love expressing intelligently through energy
2) Thought (beliefs, attention and intention) directs and forms energy
3) The law of attraction and repulsion - we attract what we believe in and repel energy that doesn't fit our beliefs

We are ultimately responsible for the way in which we use our attention and intention and also for the relative contraction or expansion of our consciousness. The second part explains in retrospect how life could look after the transformation of consciousness where people strive to become self-actualised in the sense in which Abraham Maslow expressed it. This applies to religion, business, relationships, lifestyle, health and education. Bobbie sees the major feature of the 21st Century as a transformation of consciousness partly brought about by the pressure we are currently experiencing from the speeding up of technology and the stress it generates as well as disconnecting us from our inner source. Interestingly, she envisages companies run by women CEOs and men as COOs to make the best of feminine and masculine qualities. So the book is an invitation to co-create a new world, beginning with a simple practice of silence and asking questions to help guide our own unfolding process of life - a wise, simple and compassionate contribution.

Factfulness

Hans Rosling with Ola Rosling and Anna Rosling Roennlund

Sceptre Books 2018, 342 pp., £12.99, h/b.

Subtitled '10 reasons were wrong about the world – and why things are better than you think', this book is a corrective to an over gloomy prognosis of our planetary future based on selective reporting for dramatic effect and widespread ignorance of significant facts. The book begins with a multiple-choice test with three potential answers, giving a chance chimpanzee score of 4/12 – in fact, the majority of people get the answers wrong. For instance, the first question about girls finishing primary school – is it 20/40/60 percent? The answer is 60. With respect to worldwide life expectancy, do you think it is 50, 60 or 70 – the answer is 70. How many of the world's one-year-old children have been vaccinated against some disease? 20/50/80% - the answer is 80. Likewise, for some access to electricity, where the options of 20/50/80, the answer is 80. What about the proportion of world population living in extreme poverty in the last 20 years – has this almost doubled/remained roughly the same/almost halved. The answer is almost halved, largely driven by progress in China and India. In 1997, 42% of their population were living in extreme poverty, defined as an income of less than one dollar a day, while by 2017 this had fallen to 12% in India (270 million drop) and a mere 0.7% in China - these figures in turn create a new challenge of rising demand for meat in the emerging middle class.

The book is structured on illustrating the impact of 10 misleading instincts - gaps using only two categories when most people are in the middle, negativity, straight line extrapolation, fear, size, generalisation, destiny, single perspective, blame and urgency. Separately and combined, these instincts distort our perception and each has a factfulness corrective. A very useful tool is the four levels of income (p. 34 and inside back cover) at under $1 a day, under $8 a day, under $32 a day and over $32. At the moment, the majority of people are level 2, but this will be level 3 by 2040, with 1.7 billion people on level 4 as compared with 800 million at present. Things may be reported as bad, many things are in fact getting better, although this is unlikely to be reflected in the media any time soon as much good news involves either slow change or is insufficiently dramatic. While it is true that the world population curve is flattening out with 2.5 babies born per woman and that there will be only 2 billion children in 2100 - the same figure as now - there is a projected overall population of 11 billion, and the authors do not address the issue of how we are going to manage these numbers (much of the increase is forecast to be in Africa). We are already consuming the equivalent of 1.6 planets a year. Hence my initial sentence about the book being an encouraging corrective to our thinking, but this should not make us complacent about the challenges we face.

How to Get Rich and Famous

Tom Butler

Astraea Ltd 2018, 259 pp., no price given, p/b.

This is a personal book diagnosing the breakdown in our existing systems and ways in which we can all make an individual difference. As readers discover, the author has a very different take on the

real meaning of being rich and famous in the context of the big picture or story of our time – his approach is based on empathy, interconnectedness, collaboration and sharing rather than the control, manipulation and exploitation that characterises our current systems. Our own response begins with thinking in a new way, then choosing and acting accordingly. The author uses terms such as 'must' and 'should' liberally, but it is not always clear how these large systems in which we are embedded can or will be transformed. An important element, naturally, is reform of the education system, which I discuss in my review of Ted Dintersmith below in terms of liberating human potential. The author talks more about meaning in life rather than of life, and I cannot agree with his assertion that there is no evidence for anything beyond, and that when your physical body dies, so does your soul (p. 210). The last part proposes useful actions that readers can take in terms of choices and lifestyle – here it is clear that we need new steady state economy based on new indicators but this message has not yet got through to the mainstream. However, the appendix on systems failures past and present is an indication that we can change our behaviour and that there are indeed signs of this emerging.

The Maria Thun Biodynamic Calendar 2019

Matthias Thun

Floris Books 2018, 64 pp., £7.99, p/b.

While the core of this annual biodynamic Bible remains the calendar, every year there are special features, which this year includes a very useful section of tips for growing different plants, companion planting preparations and animal and insect pests. Gallagher itself contains detailed advice as well as a glossary of crop types and an extensive bibliography. Essential reading for organic gardeners, and for the technically minded there is now an app that adjusts to your time zone.

The Moon Gardener's Almanac 2019

Edited by Therese Tredoulat

Floris Books 2018, 117 pp., £8.99, p/b.

This companion book has sold extensively in France to tens of thousands of people. It explains basic astronomical information and gives a useful classification of the four modes of root, leaf, flower and fruit. Plants are subject to many influences, including the quality of the soil, location the companion planting. There is also advice on designing your garden. The calendar itself gives space for personal observations and it is intriguing to read advice not to garden before or after certain times when, as far as I can work out, it would be dark! E.g. do not garden before 5:15 AM on January 7. Following all the advice would be almost a full-time occupation, but the general reader can glean a great deal of useful guidance. Readers are also recommended to keep a weather journal and there is specific advice for individual vegetables.

EDUCATION

Speak Freely – Why universities must defend free speech

Keith E. Whittington

Princeton 2018, 208 pp., £20, h/b.

This is an important and robust book about an important concern for the future of liberal democracy. Readers will be familiar with incidents reported from universities where speakers have been 'no-platformed', protests have demanded the removal of statues associated with imperialism, and students have insisted on being protected from certain opinions. The author sets the discussion within the context of the mission of a university to produce and disseminate knowledge in a spirit of free critical enquiry and truth seeking. This contrasts with the earlier mission of inculcating Christian orthodoxy, overturned in the course of the 19th century. Here John Stuart Mill made a critical contribution with his work on liberty and free expression.

The central chapter discusses free speech on campus, dealing with trigger warnings and safe spaces, hate speech, forms of protest, student groups and outside speakers, and finally faculty and academic freedom. Students should be exposed to contrary viewpoints so that they can arrive at their own rational judgement – even in the 18th century Voltaire maintained the right to free expression even if he vehemently disagreed with an opponent. This is surely the essence of the enlightenment spirit. Academics should also be free to enquire widely in pursuit of truth, while in practice there is an underpinning ideology of materialism that can be dangerous to question, as we examine in our Galileo Commission report. Paradoxically, liberalism involves a degree of tolerating the intolerable. The author sums up his case as follows: 'if students are to prepare themselves to critically engage the wide range of perspectives and problems that they will encounter out in the world across their lifetimes, they must learn to grapple with and critically examine ideas they find difficult and offensive.' (p. 178)

What School Could Be

Ted Dintersmith

Princeton 2018, 264 pp., £19.95, h/b.

Subtitled 'insights and inspiration from teachers across America', this extraordinarily important book results from the author's field trip visiting schools from all 50 states in a single school year. The measurement culture described - ranking rather than releasing potential - is common across the Western world as governments try to close the attainment gap in pursuit of equality. However, it becomes very clear that schools are oriented towards tests and tables, but these 'don't lend themselves to higher-order competences like creativity, communication, critical analysis, collaboration, leadership, tenacity and entrepreneurship' (p. 64). Schools prepare students for college application, not college and still less for life and work. Ironically, schools improving their rankings are mostly doing obsolete things better, since the underlying philosophy still rewards factory production of rote learning. Moreover, academic and practical learning could be combined rather than separated, for instance in terms of physics and wiring electrical systems, history and producing documentaries, civics and legal defence work.

Based on many inspiring examples, the author advocates a shift of priorities beyond measurement, produces a telling table (p. 216) reproduced below:

Century-old model	*A new vision*
Industrial	Innovative
Centralised	Decentralised
Data driven	Purpose driven
Micromanaged classrooms	Trusted classrooms
Standardised curriculum	Organic learning
Drill	Create

Content and low level skills	Essential skill sets and mind-sets
College ready	Life ready

Based on his interviews, the author proposes his PEAK model, standing for Purpose, involving projects with real-world impact, Essentials in terms of skill sets and mind-sets, Agency in terms of setting goals and managing learning, and Knowledge in depth and retained, where teachers play more of the role of guidance and mentoring. The case examples given in the book show how this can work in practice, energising both teachers and learners in the process. Essential and inspiring reading, especially for government education ministers - I will be having a copy sent to John Swinney in Edinburgh.

Creative Place-Based Environmental Education

Jorunn Barane, Aksel Hugo, Morten Clemetsen

Hawthorn Books 2018, 168 pp., £30, p/b.

This pioneering book has been translated and extended from Norwegian, which provides the original context for this exploration of place-based environmental education where the keywords are growth and community. This growth takes place in multiple dimensions, both human and ecological, for instance in the garden. The place itself is situated within a landscape, out of which the culture grows and which exercises influence in its turn. The curriculum itself is anchored in place as national is transformed into local and children are taught to look after vegetables, animals and each other. This creates a widening circle into the locality, cultivating community and compassion in the process and providing a place for participation, engagement, evolution and transformation. The book describes the Aurland model before moving on to discuss themes such as creativity, cooperation, integrity, and seeking meaning. The final part explores different aspects of ecopreneurship and the emergence of an international movement based on the kind of inspiring educational example provided in this case study.

GENERAL

The Infidel and the Professor

Dennis C. Rasmussen

Princeton 2017, 316 pp., £20, h/b.

David Christie writes: This is a valuable addition to the literature of the Scottish Enlightenment and will appeal more to the curious general reader than the professional in the field. Rasmussen comprehensively covers the social and technical aspects of the many links between "le bon David" and "the Adam and the smith" of economics as well as providing a good account of the intellectual climate of "the hotbed of genius" that was evident in the Scotland of that time.

Rasmussen underlines the importance of Hume and Smith's huge contributions to the political economy and philosophy in the warp and weave of the Scottish Enlightenment. There were few hard and fast lines of demarcation between these subjects and both men made path breaking contributions to both subjects. That they were friends is true although I sense that Rasmussen tries just a bit too hard to plead the case that this friendship was crucial in each other's intellectual development.

He provides clear accounts of the content of the works of these titans and shows where they overlap and differ. The reader will come away well informed and will be grateful for the authors easy manner in communicating what are sometimes complex matters. Rasmussen reminds us that Hume shows that not all philosophers are dull dogs and suggests that Adam Smith, whose work is nuanced, would not be pleased to have been hi-jacked by ultra-marketeers.

Secret Wars

Austin Carson

Princeton 2018, 325 pp., £27, h/b.

This is a very interesting and thought-provoking analysis of covert conflict in international politics using many case histories to argue for the thesis that secrecy of state involvement is a response to the persistent concern of limiting escalation of war, even though both sides are collusively aware of the actions of the other. The book addresses the questions of why states intervene covertly rather than overtly and why they collude rather than expose each other. Historically, it is interesting to reflect that the human devastation of the First World War led leaders to think about limitations of conflict as it showcased the destructive potential of modern warfare, which has of course intensified with every technical advance in weaponry. The book looks specifically at interventions in the Spanish Civil War, the Korean War, the Vietnam War, Afghanistan and finally covert operations in US occupied Iraq between 2003 and 2011. These are examined in greater detail in subsequent chapters as readers understand the complementary roles of overt and backstage involvement, and the case is persuasively made for the overall thesis in a series of concluding tables. The thesis potentially extendable to cyber war and the actions of Putin seem to embrace this full spectrum using plausible deniability and outright denial to create strategic confusion. Although aimed at students of international relations, the book of interest students of politics more generally.

The Internet Trap

Matthew Hindman

Princeton 2018, 240 pp., £24, h/b.

Subtitled 'how the digital economy builds monopolies and undermines democracy', this book reinforces the arguments of other experts in the field with a considerable amount of data and analysis. We have become used to speaking about the attention economy and scarcity of attention in relation to information overload - here one gains a better understanding of the importance of 'stickiness' and concomitant inertia in building audiences for commercial exploitation. It turns out that there are significant economies of scale, and that Google spent $59.6 billion on research, development, facilities and equipment between 2003 and 2013. As the author shows, there is in fact no free audience, and it is very expensive to acquire one even if the content is subsequently freely distributed. A key factor is speed, even in terms of microseconds, which promotes stickiness and suppresses the wish to close the page and migrate elsewhere.

Personalisation has been a key driver of algorithms and recommendation systems, promoting lock-in and audience concentration. Indeed, the overall process has been one of concentration, especially in terms of advertising spend, which has drastically migrated away from print media – in 2000, US newspaper ad revenue was $65 billion, plunging to

just $18 billion in 2016. The author has some useful advice on digital audiences and stickiness in terms of what has been shown to work: faster load times lead to higher traffic, content must be good in terms of update frequency, quality, quantity and variety; site design and layout are important, as are personalised content recommendation systems. The final chapter spells out the gap between the imagined Internet and the real one, for instance in terms of a thin spread of audiences as opposed to the reality of one third of web visits being to the top 10 firms; and only the larger sites can efficiently personalise ads and content. All this is driven by fierce competition for attention, which arguably makes it all the more important to be able to switch off and take a digital detox.

A Supernatural War

Owen Davies

Oxford 2018, 284 pp., £20, h/b.

Owen Davies is Professor of Social History at the University of Hertfordshire author of a number of books on witchcraft and magic, including the Oxford Illustrated History that I reviewed last year. Subtitled 'magic, divination and faith during the First World War', this gives a fascinating insight into supernatural beliefs and practices prevalent during the period. Ironically, Max Weber was formulating his ideas on Protestant disenchantment just at the same period as this new expression of enchantment appeared. The author reminds us of the relatively recent development of psychology, anthropology and folklore as well as the founding of the Society of Psychical Research in 1882. The chapters cover with detailed illustrations prophecies, visions, spirits and psychics, fortune-telling, battlefield luck in relation to talismans and other forms of protection - and more generally how people sought reassurance in such a dangerous period where, in the trenches, death could supervene any day.

Although the book highlights such beliefs and practices during the war, it is clear that there is a cultural continuity both before and after. The author concludes that 'with respect to this continuum of supernatural beliefs and practices, the First World War was influential in the way it cemented the commercialisation of talismans and amulets, and helped incorporate commercialisation into the realm of the magical, rendered mundane the notion of life after death, and psychologised the psychic realm.' In individual cases, readers can ask themselves about cause and effect, fate and luck, raising larger issues about life and death, which are sensitively addressed by the author using his extensive background knowledge.

King Charles the Wise

Nicholas Hagger (SMN)

O Books (John Hunt) 2018, 63 pp., £6.99, p/b.

Using the framework of his world constitution and argument for a democratic world state in his books reviewed in the last issue, Nicholas Hagger has written a poetic masque starting from questions arising from Brexit and Britain's potential role in a more united world. The plot is that Zeus wants a democratic world state to end all wars, and sends the goddess Minerva to seek support for this humanitarian vision from the future King Charles, who is exposed to the competing narratives of Britannia, Europa and Colombia representing the UK, EU and US. He is also advised by the vision of previous Kings and a wise inner understanding of the One. As one might expect, the author shows a broad understanding of the world situation communicated through various characters. Minerva observes:

The highest Wisdom flows into the mind's

Higher consciousness from the beyond, from

The Light, Supreme Thought in the universe.

It streams into my head as shafts of Light.

Charles responds that his reign will call for a new world vision, also as a spokesman for humanity, which he already is, for instance in his role at the Paris climate change summit. There is no doubt that we need people of vision if we are to make the transition to a democratic world state even within the next hundred years. The masque is an intriguing way to convey this message.

When Wine Tastes Best 2019

Floris Books 2018, 48 pp., £3.99, p/b.

This book has appeared annually for a number of years and invites the reader to experiment on best times to drink wine, with an accompanying calendar. Using the biodynamic classification, you are advised to drink Wine on fruit and flower days and it is interesting to learn that Tesco and Marks & Spencer now only hold wine tastings on these favourable days, dependent on the position of the Moon. A bonus item this year discusses the quality of biodynamic wines and the factors making for enjoyment. The information is also available on an app.

OTHER BOOKS RECEIVED

Stoicism – A Very Short Introduction

Brad Inwood

Oxford 2018, 118 pp., £7.99, p/b.

Readers of reviews in this journal will be aware that there has been something of a revival of Stoicism, which this book takes into account. Interestingly, the emphasis seems to be largely on Marcus Aurelius and Epictetus, who address ethical themes and the good life; Seneca is also quite popular and new editions of Stoic texts are being published by Princeton University Press. This book shows that ethics is one of three major concerns for this philosophical school, the others being physics and logic (including the nature of rationality). The book is a very good place to start and contains extensive extracts from key texts.

Consciousness – A Very Short Introduction

Susan Blackmore

Oxford 2017 (2005), 146 pp., £7.99, p/b.

A revised and updated edition drawing on recent research – Sue's position on issues such as NDEs and the self is well known in the field, so readers should bear this in mind.

Artificial Intelligence – A Very Short Introduction

Margaret Boden

Oxford 2018, 164 pp., £7.99, p/b.

An authoritative introduction to the field covering all major aspects and issues.

Without Words – Beinsa Douno

A saint attended one of those universal religious meetings devoted to philosophical issues, where many such topics were discussed. Most guests talked and expressed their opinions – only the saint remained silent the whole time.

Finally, they asked him: "What do you think, sir? Can you say a word or two on the matter in hand?

"I don't know philosophy, so I cannot say anything in this field."

"Don't you know anything at all?"

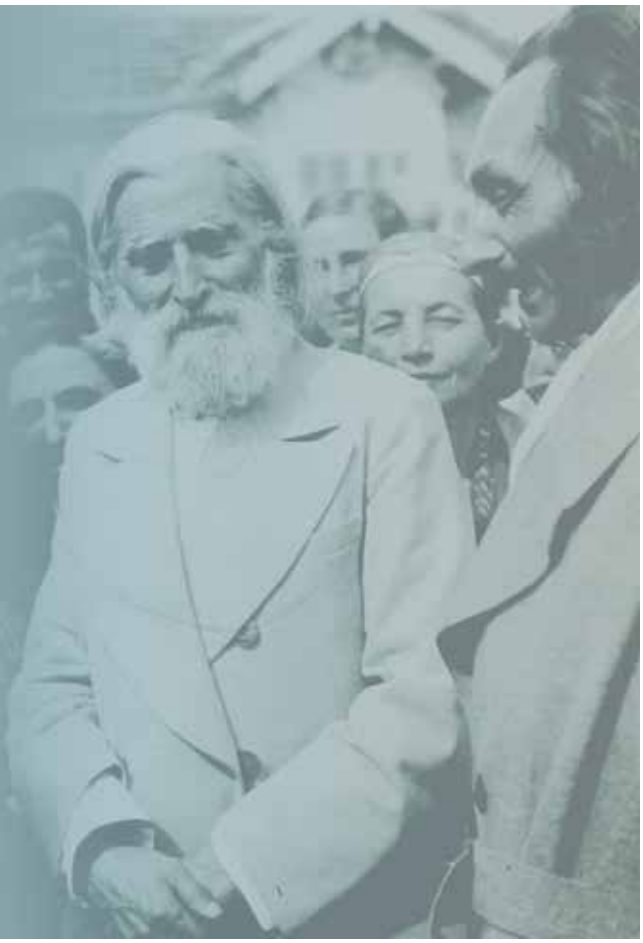
"I know just one thing."

All of them shouted as one, "Share it with us!"

The saint took a big stone in his hand, squeezed it, and by gosh – water started running from below and fire came out from above.

What is better: to philosophise over insoluble topics or to squeeze a stone in your hand and have water coming out and fire rising up from it?

From: Lights along the Path of Life, p. 80



network

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 including discussion groups*
- *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*
- *Student concessionary rates and some bursaies available*

Joining the Network

Membership of the Network is open to anyone who wishes to explore some of the most difficult questions of our time in concert with a community of like minds. Student members must be studying towards a first degree engaged in full-time study.

Subscription Rates

Membership of the Networks costs *£60 (with printed review). Please contact the office for further details.*

£36 electronic and undergraduate student membership free.

Membership Applications

To request a membership application form, please contact:

The Network Manager,
The Scientific and Medical Network,
151 Talgarth Road,
London W14 9DA, England
Tel: +44 (0) 203 468 2034

Email: info@scimednet.org

www.scimednet.org