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Contents

<i>From the National President</i>	66	<i>Forms are Many, Life is One</i>	88
<i>Bohm's Quantum Physics Recognised at Last</i>	67	<i>Calendar of Events</i>	91
<i>Occultism and the Philosophy of Science</i>	72	<i>Agenda- Convention Business Meeting</i>	92
<i>What Occult Science Affirms Western Science Confirms Eventually...</i>	77	<i>2010 Annual Convention- Launceston</i>	93
<i>Using Scientific Methodologies to Explore the Transpersonal</i>	83	<i>New Acquisitions- Campbell Library</i>	94
		<i>News and Notes</i>	95

The Theosophical Society welcomes students or seekers, belonging to any religion or to none, who are in sympathy with its Objects. The motto of the Society is *There is no Religion higher than Truth*. The word *Religion* in this statement is a translation of the Sanskrit *dharma*, which among other things means practice; way; virtue; teaching; law; inherent nature; religion; and that which is steadfast or firm. The word *Truth* in the motto is a translation of the Sanskrit *satya*, meaning among other things, true, real and actual. It derives from the root *sat*, sometimes translated as boundless unconditioned existence.

Theosophy is not defined in the Constitution of the Theosophical Society, or in any official document. It literally means divine wisdom, *theosophia*, but members of the Society are left to discover what it is for themselves, taking as guides whatever religions or philosophies they wish.

The Three Objects of The Theosophical Society

To form a nucleus of the Universal Brotherhood of Humanity without distinction of race, creed, sex, caste or colour.

*To encourage the study of Comparative Religion,
Philosophy and Science.*

*To investigate unexplained laws of Nature and the
powers latent in the human being.*

From the National President ...

Dara Tatray



The present issue of *Theosophy in Australia* is devoted to the interface of science and theosophy; a rich terrain barely touched upon here. It once again carries a contribution from the National President and the Education Coordinator. The alternative was to print a number of blank pages in their place.

The TS is made up of members, from all walks of life, with original thoughts and insights to share on philosophy, art, music, science, health, culture and spirituality. It would be lovely to hear from them in the form of articles, book reviews, poems and short opinion-pieces; written preferably in plain English. There is little point in rehashing old ideas about Theosophy; but much to be gained from sharing the results of our enquiries, studies and life-experiences, all of which have, no doubt, been shaped into a finer form by our exposure to The Theosophical Society and the literature it has made available over the years. Naturally a certain publication standard has to be maintained, especially in terms of referencing, but one need not be put off by it. I do not envisage any censorship, so long as each item fits within the parameters of the Objects of the Society.

People may not be writing for the magazine, but they are certainly reading it. A considerable number of letters have been received in support of the previous issue and the Study Paper which was sent out with

it. Along with the phone calls and face to face remarks, they represent something of a mandate to carry on in that direction. There must however be a number of members with misgivings of one kind or another. It would be good to hear from them as well. Otherwise, it will not be possible to engage in a creative dialogue in which a new direction might be worked out together; and on this dialogue much depends.

Communication is not a matter of people agreeing with each other, or being able to accurately repeat what the other said; rather it is a question of each person involved in the conversation looking at the same thing at the same time with a similar intensity. That is when new meaning is created. Certainly in The Theosophical Society, which is a member-based Society, nothing lasting can take place without the participation of a considerable number of its members. Viewed negatively, even the problems that we have in the Society are the result of the thoughts and actions of a large number of members over a significant period of time. And so it is with a good idea or a new direction; it has to be carried out and worked on by a significant number of us. ✨

Bohm's Quantum Physics Recognised At Last

Hugh Murdoch



Many theosophists will know of David Bohm as a close associate of J. Krishnamurti, and also as a unique philosopher. However his primary role was as a quantum physicist. He had a unique realistic interpretation of quantum physics (see below) which was largely rejected or ignored by virtually the entire physics community from 1952, when he first developed his approach, until his death in 1992. I surmised at the time that perhaps he might be appreciated in the new century although I was not optimistic.

Bohm was born at Wilkes Barre in Pennsylvania in 1917 and obtained his PhD under Robert J. Oppenheimer at University of California, Berkeley, in 1947. He held various positions at Berkeley until 1961, when he was appointed an assistant professor at Princeton University. There he had a number of discussions with Einstein who was at Princeton's Institute of Advanced Studies. They agreed on their disapproval of Niels Bohr's concept of the non-reality of the quantum world prior to observation of the results of an experiment. However, they disagreed with what was then known as nonlocality (or distant interconnectedness) but is now often referred to as entanglement. Einstein referred to it as 'spooky action at a distance'. For Bohm it is not only an essential feature of quantum physics but also an integral part of his philosophy of universal interconnectedness.

While at Princeton, Bohm was called to appear before the House Un-American Activities Committee to testify against Oppenheimer and others. Oppenheimer had been in charge of the atom bomb project but refused to work on the hydrogen bomb on ethical grounds. He was therefore suspected of communist sympathies, and when Bohm refused to testify he was indicted for Contempt of Congress. Although this indictment was subsequently withdrawn, he was ostracised and asked to stay away from the University. When he came up for reappointment his position was terminated and, in the climate of the day, he was unable to obtain a position anywhere in America. However, Bohm obtained a professorship at the University of São Paulo in Brazil from 1951 to 1955. He then took up a position for two years at Haifa in Israel where he married in 1956. The following year he obtained a Research Fellowship at Bristol University, and then an appointment as Professor of Theoretical Physics at Birkbeck College, University of London, where he spent the rest of his life. He retired in 1983, becoming Emeritus Professor.

At Bristol, Bohm's wife brought home a book which she thought might interest him as it talked about the observer and the observed. The book was by J. Krishnamurti, *The First and Last Freedom*, and Bohm found its philosophy very interesting and compatible with his.¹ He contacted the author and they became close associates, holding many

discussions on matters of common interest relevant to Bohm's unique philosophy of wholeness. In due course Bohm became a member of the Krishnamurti Foundation.

Bohmian Mechanics—The *New Scientist* Article

Although Bohm's work in physics was not sufficiently recognised during his lifetime there has now been a revival of what is being referred to as Bohmian Mechanics, which emphasises REALITY where Niels Bohr emphasised the "unreality" of whatever happens in a quantum experiment, prior to the resulting observation. There is a feature article on Bohmian Mechanics in *New Scientist* for 22 March, 2008. On the cover of the issue, there is the word UNREALITY with UN almost shaded out. An extract from the article says:

[The mainstream view is that] uncertainty is a fundamental feature of everything ... Indeed, quantum researchers celebrate the notion that pure chance lies at the foundation of the universe. However, a sizable minority of physicists have long been pushing entirely the opposite view. They remain unconvinced that quantum theory depends on pure chance, and they shun the philosophical contortions of quantum weirdness. The world is not inherently random, they say, it only appears that way.²

Sheldon Goldstein of Rutgers University in New Jersey and other like minded physicists have been pursuing an alternative deterministic quantum theory, in which particles 'follow precise trajectories or paths through space and time, and the future is perfectly predictable from the past'.³

The fundamentals of quantum physics are usually discussed in terms of an experiment where a series of fundamental particles such as electrons is sent through an apparatus with two

closely spaced parallel slits, toward a detecting screen which records a typical interference pattern, with alternate dark and light bands tapering off in intensity on either side. The *New Scientist* article quotes physicist Detlef Dürr to explain: 'While mainstream quantum theory insists that you can't give any account of exactly how a given particle moves, Bohmian mechanics can.' This replaces the fuzziness or uncertainty of the standard theory with certainty or determinism. An extreme view of Bohr's uncertainty contends that the pattern on the screen only becomes real when observed. Bohr has been cited as saying 'There is no quantum world; only a quantum mechanical description'. According to Bohm's theory however, 'uncertainty arises from the interactions between the measuring device and the particle. It is not inherent in the universe.'⁴

The Birth (and early struggles) of Bohmian Mechanics

At Princeton Bohm lectured on Quantum Mechanics (QM) and wrote a book on it from Bohr's traditional point of view to help himself understand it.⁵ This book has long been regarded as a classic. However, having written it, Bohm was dissatisfied, and soon published his own very different interpretation, beginning in 1952 with an important mathematical modification to the fundamental equation of quantum physics, the Schrödinger equation. This produced a term that he called the quantum potential which took account of the instantaneous effect on particles of their surroundings. It was this work which enabled him to calculate the actual paths of the particles in the double slit experiment, in defiance of Bohr's so-called Copenhagen interpretation. In the strict Copenhagen view, nothing is real until the pattern on the screen is observed.

In his later work Bohm refers to the quantum potential as 'quantum information potential'. A particle is influenced by its surroundings through the quantum information potential'.

Its influence is immediate and does not necessarily fall off with distance, as do typical physical influences. This is a much more subtle effect than is allowed in the standard theory. It provides what Bohm refers to as ‘active information’ about the surroundings. As an aid to understanding the concept of active information, he uses an approximate analogy of a ship in a fog using radar to avoid obstacles. The return radar signal gives information about the surroundings to enable the ship to avoid the obstacles but the radar does not drive the ship. The signal is *active* insofar as the information it provides about the surroundings affects the course of the ship, but it is the ship’s engines which actually drive the ship. The concept of such a ‘pilot wave’ as an explanation of quantum mechanics had been flirted with in 1927 by Louis de Broglie but he quickly discarded it following strong opposition.

Bohm’s Battle for Recognition

Bohm’s work was ignored at the time or misrepresented and spurious reasons were found for rejecting it. However, in the early days of quantum mechanics there was discussion of whether there might be some hidden variable [read as hidden factor] which could explain the puzzling implications of QM. Bohm at first cast his theory in the form of a hidden variable theory and he became stuck with the epithet “the hidden variables man.” Prominent theoretical physicist von Neumann gave a mathematical proof that no hidden variable theory could be consistent with the experimental predictions of quantum theory. The existence of von Neumann’s theorem was a major reason Bohm was not taken seriously by the main body of physicists. A more aggressive character than Bohm might have fought harder against the prejudice concerning his theory but that was not his style.

Von Neumann’s criticism was later refuted by an even more influential quantum theorist, and a major figure in the ongoing development of

the theory, John Bell, who stated in relation to Bohm’s work, ‘I saw the impossible done’. Bell showed that certain of von Neumann’s assumptions were not valid, especially as applied to the type of theory espoused by Bohm. In 1964 Bell published an important theorem which proved that ‘No **local** hidden variable theory could be consistent with quantum physics’.⁶ In the introduction to that paper, Bell refers to Bohm’s 1952 paper, asserting the crucial importance of nonlocality (entanglement) and supporting Bohm. Yet perversely, he was widely misinterpreted as condemning Bohm.

Bell went on the attack in paper after paper supporting Bohm, inventing some interesting and even amusing analogies, and producing a book: *Speakable and Unsayable in Quantum Mechanics*.⁷ Instead of talking about ‘observables’ to describe physical quantities, Bell preferred to speak of what he called ‘be-ables’, thus emphasizing their physical reality. Bell regarded it as tragic that Bohm’s interpretation (Bohmian mechanics) was not taught in university courses at least as a possible alternative explanation of quantum phenomena.

While Bohm was largely neglected, if not openly disbelieved, he did have some support, for example from Peter Holland and Jean-Pierre Vigié of the Pierre and Marie Curie University in Paris. Peter Holland published in 1993 a substantial tome consisting largely of Bohmian Mechanics.⁸ The same year Bohm and Hiley’s *Undivided Universe* was published, largely on the same topic but with some examples of philosophical thought.⁹ Bohm died suddenly of a heart attack in November 1992 just as the proof reading was completed, and Hiley saw the book through to publication. Prominent physicist, Henry Stapp, says on the back cover: ‘This book will, I believe, change the way quantum physics is taught.’

Bohmian Philosophy

The philosophical implications of entanglement are momentous. Entanglement was first verified experimentally over short distances by a subtle experiment in 1982 and has been extensively studied since.¹⁰ It means that distant objects can be connected instantaneously in subtle ways by subtle influences. No signaling is possible at greater than the speed of light, but more subtle distant interconnections are possible. Bohm was the first to seize on the wider implications of these experiments. Applied over and over again many times to the subtle interconnection of a pair of distant objects, and this ultimately leads to the subtle interconnection of everything at some deep level. This is the physical basis of Bohm's concept of the holomovement or the 'implicate order', a higher level of order than the everyday 'explicate order'. It meshes very well with his interest in Krishnamurti's philosophy. He also suggests the possibility of even higher levels of order — rather like the concept of higher planes discussed by a number of authors associated with The Theosophical Society, but perhaps less mechanistic.

Bohm wrote and co-authored numerous articles in scientific journals, especially in *Foundations of Physics*. One article written with Basil Hiley, which I am presently unable to cite, begins with the following statement:

What we are proposing is that we be ready to explore a new notion of physical reality, in which we start from **unbroken wholeness** of the totality of the universe ... We have reversed the usual classical notion that the independent "elementary parts" of the world are the fundamental reality and that the various systems are merely particular contingent forms and arrangements of these parts. Rather, we say that inseparable quantum interconnectedness of the whole universe

is the fundamental reality and that relatively independently behaving parts are merely particular and contingent forms within the whole...

Individual human beings may be considered as subsystems in a system consisting of a social group. Evidently the relationships of any two individual human beings depend crucially on the state of the immediate social group to which they belong, and ultimately on that of the larger social group. Similarly, the interactions of any two cells in the body depend on the state of the whole organ of which they are a part, and ultimately on the state of the organism as a whole ... In this way we see that there is accessible to us a very wide range of direct intuitive experience in the form of wholeness. What quantum theory as understood through [our] interpretation shows, is that this form is appropriate, not only biologically, socially, and psychologically, **but also for understanding the laws of physics**. And so we are able to comprehend the whole world in all its aspects through the one universal order of thought, thus removing an **important source of fragmentation between physics and other aspects of life**. [emphasis mine]

This canvasses just one aspect of Bohm's comprehensive philosophical thought. Remarkably, it appeared in a journal which typically publishes sophisticated articles on topics in theoretical physics.

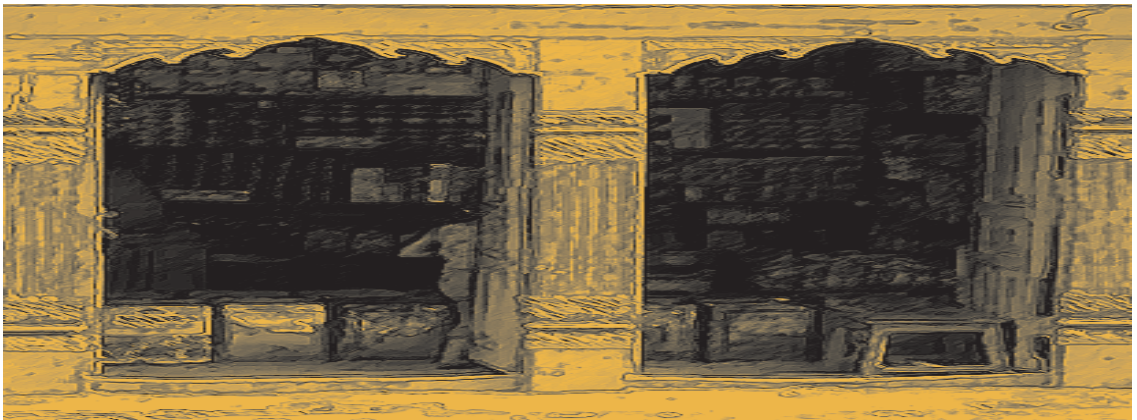
There have been many eulogies for David Bohm. Prominent physicist, Max Jammer, says in an article celebrating Bohm's 60th birthday: 'Even those who do not share his point of view, admire the originality and independence of his thought, as well as the outstanding intellectual honesty and uncompromisability of his personality.' Renee Webber (Lecturer

in philosophy at Rutgers University, and incidentally a member of The Theosophical Society) who interviewed Bohm for her book *Dialogues with Scientists and Sages* says: 'I was quite unprepared for the unusually modest and unassuming, gentle person he turned out to be'. Similarly, Robert Temple remarked on his interview with Bohm for *New Scientist* in 1982: 'Bohm's complete lack of ego or any air of importance completely disguises the enormity of his intellect.' ✨

Dr Hugh Murdoch is a former long-time National Treasurer and until recently Convenor of the Theosophy Science group in Australia.

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That power which does not respect quantity, which makes the whole and the particle its equal channel, delegates its smile to the morning, and distills its essence into every drop of rain.

Ralph Waldo Emerson

Occultism and the Philosophy of Science

Dara Tatray



One of the most interesting if problematic areas in the history of The Theosophical Society revolves around its association with occult science or occultism; an association which raised its profile to considerable heights but not without cost. The TS has had a chequered career so far as occult science is concerned and the problems it has encountered in this area, so far as public perception is concerned, are in no small measure due to a general misunderstanding of the nature of occultism and of H.P. Blavatsky's unusual use of the term. So in this brief essay I would like to clarify a few of the issues to some extent, with a view to eventually setting the record straight.

To begin with I would like to point out that many of the arguments that have been made against occultism, occult science, esoteric philosophy and other synonymous pursuits are based on precisely the argument that modern analytic philosophy has had against metaphysics generally: that is, that it talks nonsense. This is literally true, because non-sensory subjects are its staple fare, and in that sense non-sense; and it is also true that none of it can be proved scientifically. However, that is not to say that it is nonsense in the usual sense of the term, as the Logical Positivists of the 1920s and 1930s argued. Their extreme views greatly influenced modern philosophy so that unity, correspondence, the universal Self, interdependence and wholeness, which are all non-empirical, superphysical, non-verifiable notions, came to be regarded as meaningless and unscientific. Never mind that

metaphysics deals with many of the important and interesting things in life including God, Man, the Universe, and everything taking place between them. It was, according to a number of the most influential analytical philosophers of the twentieth century, just so much verbal nonsense — empty words devoid of real meaning.

So esotericists and occultists may at least feel that they are in good company in dealing with matters that are not strictly sense related, but, instead, meta-physical. This does not however mean that occultists are necessarily sloppy or woolly-headed; or that there is no room for an evidence-based approach of any kind in that field. Nonetheless, that is the prevalent assumption when dealing with the subject of occult science — that there is something spurious about it, which is certainly not always the case.

The first point, then, is that like metaphysics in general the main subject matter of occultism is super-physical or non-sensory and in that sense it has nothing to do with science as currently conceived. But that does not make it inherently unscientific in the pejorative sense. Furthermore, the language of metaphysics, meta-empirical though it may be, is what gives meaning to the empirical world. Indeed, metaphysics makes the physical world intelligible.¹ Thus, I am sure Plato would argue that it is *philosophy minus metaphysics* that is empty of meaning. Self, God, the infinite, the absolute, subtle correspondences and so forth,

are not empty words, but meaningful concepts — the standard repertoire of both metaphysics and occult or esoteric science. Of late, subtle correspondences and subtle energies are finding their way into the scientific field as well; but the prejudice against such matters is still quite strong.

So there is nothing inherently wrong with the subject-matter gracing the lecture theatres and publications of The Theosophical Society since 1875; but what about the alleged charlatanism? If metaphysics before, during and after Plato has been equally concerned with the powers latent in the human being and unexplained laws of nature beyond the purely physical, then what about the methods and practices associated with members of The Theosophical Society? Are they equally legitimate? The most notorious case of course is that of H.P. Blavatsky, the most famous occultist to come before the purview of the Society for Psychical Research (SPR), which in 1885 branded her a fraud in what is known as the Hodgson Report.² By association, it also branded The Theosophical Society bogus and unworthy of serious consideration. Much has been made of Richard Hodgson's conclusion that Madame Blavatsky was an accomplished impostor; a conclusion which remains a prevalent feature of the common lore concerning The Theosophical Society. But little is heard of the public apology made by the SPR some one hundred years later for having published that spurious report.

Vernon Harrison critically examined the Hodgson report, its conclusions and its methods and found it to be flawed and untrustworthy. Harrison was an expert on forgery and handwriting; at the time of writing his report, Research Manager to Thomas De La Rue, printer of banknotes, passports and stamps; a long-standing member of the SPR; and not a member of The Theosophical Society. In an affidavit he affirms that the Hodgson Report is not a scientific study; that

its author ignored basic principles of English justice and quoted uncorroborated statements of unnamed witnesses; that there is no evidence whatever that the Mahatma Letters now preserved in the British Library were written by H.P. Blavatsky as accused; that there is no evidence of a common origin to the KH and M scripts so that they were not written by the one person, and so forth. This affidavit and Harrison's extensive report was published in 1986 by the SPR, along with an apology for the grief caused by the spurious Hodgson Report.³

Unfortunately, apologies notwithstanding, the mud has stuck. Compilers of encyclopaedias and dictionaries, journalists and historians invariably choose to mention the 1885 report but not the 1986 report; as if one really should not let truth stand in the way of a good story. The fact of the matter however is that if the first SPR report condemned H.P. Blavatsky as a fraud in the eyes of the uncritical public, the confirmed sceptic and the sensation-seeker — then the second should exonerate her. As it turns out, the most famous occultist of the nineteenth century was not proven to be a fraud, but instead the victim of a hostile and effective character assassination on the one hand, with flawed scientific investigation and sloppy journalism on the other. One thing is now for certain that Madame Blavatsky was not the author of the Mahatma Letters. Therefore, neither she nor The Theosophical Society can be looked at askance on that account.

In short, based on all of the above, members of The Theosophical Society can now say with some confidence that by definition and by subject-matter occultism is no more a sham than is metaphysics; and that the most famous occultist of the nineteenth century was not a fraud. Furthermore, as the large bank of evidence-based research into psychic phenomena, or psi, now testifies, many of the claims and practices of occultism are in fact open to scientific investigation.

But what of H.P. Blavatsky’s brand of occultism? It influenced several generations of occultists, researchers and seekers, but is there something bogus about that? Now while Madame Blavatsky was no fraud, and while she did possess a prodigious intellect, and doubtless many other fine qualities, consistency was not one of them; and her use of the terms occult science and occultism was decidedly eccentric and even perhaps erratic. I can think of no better way of highlighting her approach — its apparent defects and its virtues — by comparing it with that of Antoine Faivre, a recognised authority on the Western esoteric tradition. In his book *Access To Western Esotericism*, Faivre outlines the esoteric sciences and esotericism along the lines of the following chart (he prefers the term esoteric to occult, but in this case they are synonymous terms).⁴ It provides a useful taxonomy of the territory, covering the fundamental components of the esoteric/occult sciences including alchemy and astrology, along with some of the key ideas, methods and aims common to them all:

ANTOINE FAIVRE’S TREATMENT OF ESOTERICISM	
Esoteric Sciences	Esotericism
Alchemy	The doctrine of correspondences
Kabbalah	The notion of a living nature
Astrology	Imagination and participation
Neo-Alexandrian	The experience of transmutation
Hermeticism	
German Nature	
Philosophy	
Rosicrucianism	Fundamental components
Concrete practices	

For purposes of comparison I have charted below the various philosophies and practices HPB refers to throughout her works as *occult sciences* and those which she consistently described as *occultism*. This immediately reveals a significant difference between her approach and that of Faivre.

H.P. BLAVATSKY’S TREATMENT OF OCCULT SCIENCE AND OCCULTISM

Occult Sciences	Occultism
Astrology	Rāja Yoga
Alchemy	Ātma Vidyā
Ritual Magic	Self-Knowledge
Magical Kabbalah	(which is of loving deeds the child)
Tantric worship	Altruism
Sorcery	Esotericism
	Theurgy or divine work
	True Wisdom
	Theosophia

It is plain that HPB’s occult sciences correspond well with Faivre’s esoteric sciences. But his use of the term *esotericism* and Blavatsky’s use of the synonymous term *occultism* are at variance. Faivre identifies the four fundamental components to esotericism as a form of thought: the doctrine of correspondences, the notion of a living nature, imagination and participation, and the experience of transmutation.⁵

Madame Blavatsky did not avoid discussing the fundamental components of esoteric philosophy and occult science in her works, but she tended to use the term occultism to refer to something more fundamental than these ideas: and that is to what might be thought of as ultimate aims and means. Going over several of her works I found that she used the word occultism to refer variously to *Rāja Yoga*, *Ātma Vidyā*, altruism, esotericism, ‘true wisdom’ and *theosophia* — which do not appear to have much to do with the occult as typically conceived. In fact, most of the time when she used the word occultism, Blavatsky was referring to the highly ethical psychospiritual system of *Rāja Yoga* or something very similar; in other words, to the highest goal and the purest means. Faivre concentrated on the fundamental components of the esoteric or occult sciences, revealing something of their

structure and functioning: whereas HPB drew attention to the highest science of the Self, *Ātma Vidyā* as it is known in Sanskrit. That is what she appeared to regard as the basis of the occult sciences. Therefore, I think it fair to say that her treatment of the occult sciences was far from spooky or sensationalist; instead, she consistently pointed to the fact that occultism minus altruism leads to sorcery, or something very much like it. She was thus neither a fraud nor a fool; but a woman of courage, intelligence and moral fibre.

If we were to combine H.P. Blavatsky’s treatment of the subject with that of Antoine Faivre we would, I believe, be well on the way towards a comprehensive overview, which in chart form would look something like this:

extension, and phenomena absolutely disconnected with those that fall under mechanical laws.⁶

Not falling under the laws of nature as then known however does not preclude them from meaningful discourse or scientific investigation. It is now well known that some of the world’s greatest scientists were interested in so-called anomalous events and anomalous states. Yet, Sir Isaac Newton’s interest in alchemy, Robert Boyle’s interest in “miraculous” healing and Sigmund Freud’s interest in thought transference have been largely ignored in standard histories of science. Towards the end of his life Freud expressed some regret that he had allowed his fear of public opinion to suppress his scientific interest

HPB and Faivre Combined		
Esoteric/Occult Sciences	Fundamental Components	Ultimate Aims and Means
Astrology Alchemy Ritual magic Magical Kabbalah Rosicrucianism Tantric Worship Sorcery	The doctrine of Correspondences The notion of a living nature Imagination and participation The experience of transmutation	Rāja Yoga Ātma Vidyā Self-Knowledge (which is of loving deeds the child) Esotericism Theurgy (or divine work) Samādhi True Wisdom
Concrete practices		<i>Theosophia</i>

We might also now add another column to the above chart to encompass the evidence-based approach to anomalous human capacities which is slowly building up into a science of the occult powers latent in the human being. HPB once quoted an unnamed Professor of Physiology at the University of Basel to say that:

... a deeper and more direct acquaintance with our *inner nature* unveils to us a world *entirely unlike the world represented to us by our external senses*, and reveals the most heterogeneous faculties, shows objects having nought to do with spatial

in telepathy. In a letter to a colleague, he admitted:

I am not one of those who from the outset disapprove of the study of the so-called occult psychological phenomena as unscientific, as unworthy or even as dangerous. If I were at the beginning of a scientific career, instead of as now at its end, I would perhaps choose no other field of work in spite of all difficulties.⁷

The father of American psychology William James made an interesting remark when writing about his conversion to the study of

anomalous states such as those exhibited by mediums in trance:

Science, so far as science denies such exceptional facts, lies prostrate in the dust for me; and the most urgent intellectual need which I feel at present is that science be built up again in a form in which such facts shall have a positive place.⁸

When science is so re-built as to make room for what are now described as anomalous states and events, I think it will start to resemble the science of *The Secret Doctrine*, or the ancient wisdom of which it spoke.

Not that science has to have the last word on everything. As Arthur Eddington suggestively put it in *Science and the Unseen World*:

We have learnt that the exploration of the external world by the methods of physical science leads not to a concrete reality but to a shadow world of symbols, beneath which those methods are unadapted for penetrating. Feeling that there must be more behind, we return to our starting point in *human consciousness* — the one centre where more might become known. There we find other stirrings, other revelations than those conditioned by the world of symbols ... Physics most strongly insists that its methods do not penetrate behind the symbolism. Surely then that mental

and spiritual nature of ourselves, known in our minds by an intimate contact transcending the methods of physics, supplies just that ... which science is admittedly unable to give.⁹ ✨

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What Occult Science Affirms, Western Science Confirms Eventually

Science Now Attests that the Heart Rules the Head

Edi D. Bilimoria

‘The God in the sun is the “I” in me’ – this, put tersely, is the essence of man’s relationship to divinity — Paul Brunton

Can modern science ever hope to elucidate this sublime saying by the philosopher/sage Paul Brunton? Surprisingly, the answer is yes. That ‘modern science is our best ally’ is a celebrated maxim in *The Mahatma Letters*,¹ alluding to the fact that science has, unbeknown to itself, already confirmed many of the occult doctrines, and will continue to furnish further proofs and evidence in the fullness of time. We can cite many cases in point to support this assertion. For instance, Einstein’s famous equation on the inter-convertibility of energy and matter followed over twenty five years after *The Secret Doctrine* was written. In a seminal passage in the latter, in the chapter entitled ‘Gods, Monads and Atoms’, we find the statement that ‘to occult science, *force* and *matter* are only two sides of the same substance’.² [The term *force* is not meant according to the strict definition in mechanics, but as used in older textbooks in a generalized sense as what is now understood as energy.] Another example is the hoary occult doctrine on the expansion of cosmos from a ‘cosmic seed’. The Sanskrit term *Brahman* derives from the root, *brih*, meaning expansion. It refers to that part of the unmanifest celestial being which initiates the process of manifestation through the various creative powers and forces in Nature, popularly



known as the Gods or the *Brahmās* — the expansion of the One in terms of the Many.

Modern big bang theory also postulates the expansion of the universe from a point. Although the expansion spoken of by Hindu metaphysics and occultism is in the nature of a change in state and condition and not a change in three-dimensional volume, this shows that physics is honeycombed with metaphysics, as declared by Madame Blavatsky. Even in biology which until now has been suffocated in an airless prison house of Darwinism, we can detect a nudge towards the occult wisdom. Leading scientists are beginning to question their own premisses and assumptions in that life is not considered to be a highly improbable chemical accident, but rather it was built into the overall cosmic scheme, and we humans are not accidental, but expected and anticipated. The best example is *Life’s Solution – Inevitable Humans in a Lonely Universe* by Simon Conway Morris, Cambridge Professor of Paleontology and a Fellow of the Royal Society.³ Conway Morris argues convincingly that the blueprint of our minds and bodies is woven into the very laws of the universe.

But the most startling and fruitful discovery in science comes from the field of consciousness research. This is currently a white hot topic of debate, both within science, and between science and religion. The scientific debate divides into two camps: those who maintain that the brain is the *producer* of consciousness,

and those who argue that the brain is the *transducer* of consciousness, rather like the electronic components of a hi-fi which convert the unheard electromagnetic signal into audible sound. The former camp regard consciousness as an epiphenomenon or by-product of transient neuronal activity in the brain (where brain equals mind); whilst the latter declare that brain activity alone cannot possibly explain personal experience (in which case brain is somehow contained within mind). Figure 1 shows an example of the glaring discrepancy between these two scientific camps. The views of Francis Crick and Gerald Edelman could not be more divergent — and both are Nobel laureates.

However in none of this heated argument is there ever any mention of the heart — until now.

WHAT OCCULT SCIENCE AFFIRMS

Consciousness is ubiquitous: not only is it present in every human being, but in every particle of Nature and in every cell. Concerning the human being, it has different grades of density, so to say, achieving its maximum density and concentration in the human heart and not in the brain. Whilst sincerely applauding their marvellous surgical techniques, we can only feel sad about the philosophical naivety of brain surgeons who say that to hold a patient's brain during an operation is to hold their consciousness in one's hands, which is to imply that such consciousness is no more than a sludge of

cerebral stuff.

In a notable paper on occult physiology, H.P. Blavatsky states that the brain is the principal organ or vehicle of the lower mind, whereas the heart is the organ of the Spiritual Consciousness.⁴ She also refers to the 'seven brains' of the heart, each organ having seven aspects (corresponding with the seven Principles); and continues by pointing

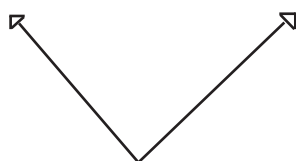
What Does Science "Think" about Consciousness?

'You, your joys and your sorrows are no more than the behaviour of a vast assembly of nerve cells oscillating across the neocortex at a frequency of 40 hertz.'

Francis Crick

To reduce a theory of human behaviour to a theory of molecular interactions is simply silly.'

Gerald Edelman



Nobel Laureates at Loggerheads over Consciousness

out that the brain contains seven cavities, 'that receive impressions from the Heart, and enable the memory of the Heart to be impressed on the memory of the Brain'.⁵ We may regard thought as the light of the brain, which, like moonlight, is a borrowed

light — borrowed, that is, as if from the sun — the heart.

In summary, the fountainhead of consciousness is the heart and not the brain, whose memory (light) is borrowed from the heart.

WESTERN SCIENCE NOW CONFIRMS

The journal *What Is Enlightenment?* is devoted to redefining spirituality for an evolving world. The feature article in the June-August 2005 edition is entitled "Is God All in Your Head?" It is a comprehensive survey and summary in three parts of the whole question of the scientific quest to solve the mystery of consciousness. It covers the science of consciousness, a key element of which concerns the neural correlates of

consciousness; then the steps towards a biology of mind; and finally the quest for a new paradigm of mind. Owing to its importance, the key passage from the last part of this article is worth quoting in its entirety:

The cranium may be home to the smartest organ in town, but when it comes to sheer magnetism, the gray matter in your head may have a little competition on its hands. According to the new science of neurocardiology, we have a second brain in the form of a dense cluster of neurons, in the heart, and its electromagnetic field is five thousand times stronger than the brain upstairs. So, don't be surprised if the next person telling you to "follow your heart" is your doctor.⁶

The above is no mere statement of generalities, but a considered view gleaned from clinical texts authored by leading scientists, biochemists, psychologists and professors of pharmacology. A sketchy account of their most recent discoveries about the relationship between heart, brain and an individual's life experiences is outlined below.

The Evidence from Clinical Medicine

Basic and Clinical Neurocardiology shows why neurocardiology is becoming increasingly relevant to the management of heart disease.⁷ This book presents novel concepts about how neurons from the level of the heart to the sensorium (involving the brain, spinal cord and the whole of the sensory apparatus including the nervous system) exert dynamic control over cardiac electrical and mechanical events over a lifetime. A sequel to this book is a technical monograph providing groundbreaking research in this field, establishing that the heart is a sensory organ and a sophisticated information encoding and processing centre, with an extensive intrinsic nervous system sufficiently sophisticated to qualify as a 'heart brain'.⁸ Then we have "*Brain-heart interactions: The*

neurocardiology of arrhythmia and sudden cardiac death".⁹ It shows that neuro-anatomic connections between the brain and the heart provide links that allow cardiac arrhythmias to occur in response to brain activation. Reviewing possible mechanisms of brain-related arrhythmias, the authors suggest that the nervous system directs the events leading to cardiac damage.

The most astonishing account is *Knowing By Heart: Cellular Memory in Heart Transplants*.¹⁰ This paper presents landmark accounts of what occultists have always known: that consciousness is ubiquitous and pervades each and every particle of the universe as indeed it does the human body and its cells as we said before. In the case of the human being, the medical profession uses the clinical and safe term *cellular memory* to deal with the fact that the cells in our bodies contain information about our personalities, tastes and histories. Evidence of this phenomenon has been found to be most prevalent in heart transplant recipients and cannot be explained away by the influence of drugs used to suppress donor rejection rendering the patient more receptive to the memory of their own forgotten life history. Just one of several examples concerns an eight-year-old girl who received the heart of a ten-year-old girl who was murdered. Shortly after receiving her new heart, the girl began having recurring nightmares about the man who had murdered her donor. She believed she knew who the murderer was. Her mother finally brought her to a psychiatrist, and after several sessions the girl's psychiatrist 'could not deny the reality of what the child was telling her.' They decided to call the police, and using the descriptions from the little girl, they found the murderer. According to the psychiatrist, 'the time, the weapon, the place, the clothes he wore, what the little girl he killed had said to him ... everything the little heart transplant recipient reported was completely accurate'.¹¹

Some physicians and scientists have tried to gain understanding of cellular memory through psychological, metaphysical, and even supernatural terms. They have gone to these unconventional lengths in order to try and explain cellular memory because the incidents described above lie outside the boundaries of materialistic theories about memory and consciousness.

The ramifications of all this are serious and wide ranging. Just two that spring to mind concern the bearing on the consciousness of human carnivores, and the impact on the human heart of love. If each cell retains some imprint of the thoughts and feelings (consciousness) of its donor, then what are the implications for meat eaters? (Not that everyone is in a position to be vegetarian.) Are they not ingesting, at a subliminal level, the element of abject terror that an animal experiences at the moment of death? Concerning our feelings, to die of a broken heart might be more than a sentimental turn of phrase enacted in soap operas. It can literally be the case when the heart, as the seat of love, is bottled up and deprived of its feeling-nourishment and so withers and dies. Perhaps also heart attacks are rather more to do with the WAY in which we use our heart centre, and less to do with purely physical factors such as diet, exercise and smoking.

In fact our ordinary everyday language and gesture provide us with many clues. We say ‘learning BY HEART’ when we have committed something to memory. We do not say ‘learning by brain’, or even ‘learning by mind’. Moreover have you ever seen someone who refers to himself by pointing to his head? Do we not touch our hearts when we utter the personal pronoun ‘I’?

UNITING OCCULT SCIENCE WITH WESTERN SCIENCE

Figure 2 shows the salient facts from what we have just presented. The top half of the diagram summarizes the occult doctrine about the seven cavities in the brain receiving impressions from the heart to enable the memory of the heart to be impressed upon the memory of the brain (see Ref. 4); and the scientific corroboration about a ‘second brain’ in the heart comprising a dense cluster of neurons possessing a magnetic field five thousand times stronger than the neurons in the brain (see Ref. 6).

The bottom half of Figure 2 shows the correspondences between Man’s principles and brain function, taken again from Ref. 4.

POSTLUDE

Finally we revert to our opening quotation. Roger Penrose has recently produced a new mathematics to prove that where dendrites meet at the synapse — of which we have trillions in our body and brain — is an electromagnetic aura.¹² And, we find that the electromagnetic field of the heart produces, holographically, the same field as the one produced by the earth and solar system. Nowadays, physicists are beginning to look at electromagnetic auras as, simply, the organization of energy in the universe. All these are operating holographically, at the smallest, unbelievably tiny level between the dendrites at the synapse, the body, the earth, and on outward to the sun, and very likely, beyond. All are operating holographically and uniquely.

So indeed is there a sacred correspondence between the sun and the heart. ☩

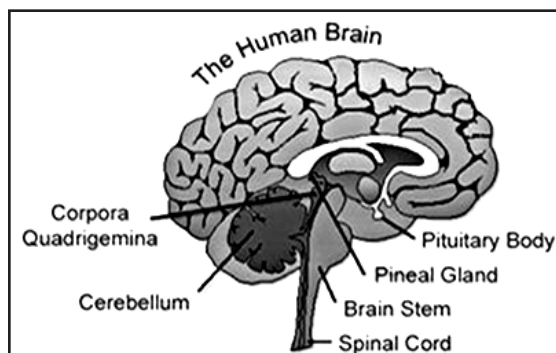
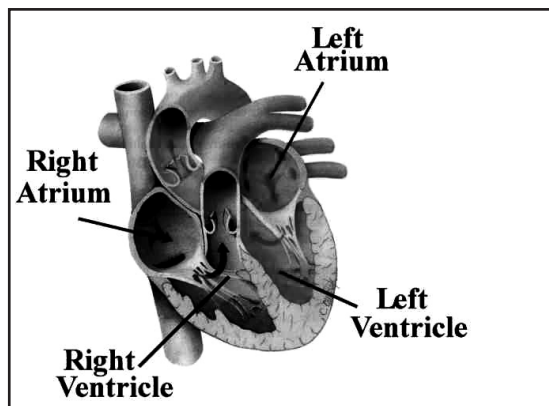
Figure 2 Occult Neuroanatomy

As Moon-Light is Borrowed Sun-Light, so
 “Brain Light” is Borrowed “Heart Light”

– The Heart Indeed Rules the Head .

From Occult Science: Seven cavities in the brain receive impressions from the Heart to enable the memory of the Heart to be impressed on the memory of the Brain.

From Neuroscience: The latest science of neurocardiology shows that we have a SECOND BRAIN in the form of a dense cluster of NEURONS, in the HEART, and its electromagnetic field is five thousand times stronger than in the brain.



LIGHT

CORRESPONDENCES BETWEEN¹³

MAN’S PRINCIPLES

BRAIN ANATOMY

Desire (Kâma)

Cerebellum and in the lower part of body with the Liver and the Stomach

Mind driven by Desire (Kâma-Manas)

Corpora Quadrigemina

Minde per se (Manas Antahkarana)

Pituitary Gland (seat of psychic vision)

Mind embraced by Wisdom (Manas-Buddhi)

Pineal Gland (seat of Spiritual clairvoyance)

Auric Egg

Cavity of skull filled with Akasha

What Occult Science Affirms, Science Eventually Confirms. That is why ‘Modern Science is our best Ally.’

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Your time is limited, so don't waste it living someone else's life. Don't be trapped by dogma which is living with the results of other people's thinking. Don't let the noise of others' opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become. Everything else is secondary.

Steve Jobs, CEO Apple Computer Inc.



USING SCIENTIFIC METHODOLOGIES TO EXPLORE THE TRANSPERSONAL

Rosanne DeBats

The great divide between science and spirit which marked the 20th century is dissolving in this 21st century. At least some scientists are again interested in that which is beyond the material world, thus reclaiming a richness of thought which existed in the past, and examining some of the more interesting questions of our times.

A scientific attitude involves reason-based analysis of observable reality. Science does not produce unquestionable truth. Rather, it tests aspects of the world and provides a reasonable theory to explain it. When new information is found, various hypotheses are formulated or existing ones revised, and the most plausible explanation is selected after analyzing the collected evidence. A scientific hypothesis is like a story. Learning to do science involves learning how to tell a particular kind of story: each discipline working with a distinctive set of actors and behaviors, with their typical causal motivations.

While reason and objectivity are central to a scientific approach, the engine driving things forward is curiosity. The scientific mind finds things interesting, and wants to know how best to explain them, and how they work.

The Scientific Method

Before briefly outlining the scientific method I would like to distinguish it from scientism, fringe science, pseudo science and junk science. The term *scientism* refers to limiting



hypotheses to material explanations. If the evidence suggests that something beyond the material world is involved, the response is either to create a more complicated materialist hypothesis, or to say that the facts are wrong. Scientism can be detected in some scientists' responses to near death experiences and to crop circles. This is a philosophical position, not a scientific one. It is actually counter to the practice of true science, which looks at data and creates the most simple and elegant theory to explain it. It is also a sociological phenomenon: among some scientists only some stories are allowed.

Fringe science is by definition at the fringes of mainstream academic disciplines. It refers to unusual theories or models of discovery that have their basis in established scientific principles. Sometimes such theories are advocated by scientists established in their field, who are courageous enough to go outside the prevailing norms of their discipline and tell a different story. A number of accepted theories had their origins as fringe science — the earth's movement around the sun, plate tectonics, and the viral cause of stomach ulcers are all examples. Each case of the movement of a fringe science to the mainstream has its own unique story in the history of science.

Pseudo science is a term used for a body of knowledge or methodology which claims to be scientific but does not adhere to the methodological requirements of science. While the differentiation between fringe science and pseudo science is not always

clear, pseudo science is more likely to rest on vague descriptions, untestable statements, an over-reliance on confirmation rather than refutation or falsifiability and not be open to testing by others. There is also a certain amount of *junk science*, which is carried out for political, ideological or financial reasons, in order to “prove” whatever is of advantage. Research carried out by tobacco companies on the health effects of smoking is one example; as is research into the environmental effects of industrial processes, carried out with a vested interest by the industry involved.

There is often a problem of demarcation between these, and the term pseudo science is often used emotionally, to undercut the validity of uncomfortable alternative theories.

The word *science* is really shorthand for a particular method, known as the scientific method, or the experimental method, which is generally considered to involve a number of steps:

1. Define the question
2. Gather information and resources (observe)
3. Form hypothesis
4. Perform experiments and collect data
5. Analyze data to test the hypothesis
6. Interpret data and draw conclusions that serve as a starting point for new hypothesis
7. Publish results
8. Retest (frequently done by other scientists)

This is the gold standard in answering questions which allow experimental manipulation of variables. This method may be used to test a wide range of unusual claims, including those discussed below.

Effect of Blessing on Water

Dr Masaru Emoto, a Japanese scientist, captured the imagination of people around the world with his work looking at the effect

on molecules of water by thoughts, words and feelings. He claims that crystals formed when water is frozen show changes when specific concentrated thoughts have been directed toward the water. He has said that water from clear springs and water exposed to loving words show complex and beautiful snowflake patterns. In contrast, polluted water or water exposed to negative thoughts, form incomplete asymmetrical patterns which are unattractive. Dr Emoto’s experimental work has been criticized as pseudo science, for not employing double blind controls. In his lab the person doing the photographing and the person judging the beauty both know where the water is from. This makes the results susceptible to selection bias and confirmation bias, with the attitudes of those carrying out the experiment causing them to look for examples which match their expectations. He has also been criticized for not sharing sufficient details of his approach to allow the scientific community to replicate the experiments.

Dean Radin, Senior Scientist at the Institute of Noetic Sciences, has however employed a rigorous double blind research design to test Dr Emoto’s claims. Dr Emoto was happy to participate in the experiment. The double blind experimental design was of high standard, the lab technician did not know which water sample was which, and the effect of the blessing on the water was shown to be statistically significant. The resultant paper has been published in a peer-reviewed journal and so, Dr Emoto’s claims have now been verified using scientific methodology.¹

Miraculous Healing

But not all interesting and important questions can be approached through direct experimental manipulation. Miraculous healing is a case in point. Richard Dawkins made much of this in the two-part series on the dangers of religion, *The Root of Evil*, aired on ABC

television (27 May 2007). It was reported in the mini-series that eighty thousand people visit Lourdes each year, and have done so for over one hundred years. During that period there have been sixty-six declared miracles, in which, after rigorous examination of the facts, it appeared that a healing had occurred which could not be explained by modern medicine. In addition there have been over two thousand unexplained cures, which I imagine are cures not quite as impossible as the ones declared miracles. It was also stated that millions of people have been healed in non-physical ways, including psychological changes and spiritual grace. According to Richard Dawkins, out of millions of pilgrims, sixty-six cured add up to no evidence at all. Furthermore: ‘No one has ever had a re-growing of a severed leg. It is all things that could have gotten better anyway’.

This is an incorrect use of statistics. Probability is relevant for things like the throw of a dice or the choice between objects, where hits and misses are equally possible. A hit or miss with a healing is quite different. The fact that there were sixty-six cases which could not be explained by medical science suggests that such “miraculous healing” is not an anomaly — a one off event — but due to some infrequent but nonetheless existent causation. In declaring that ‘there is no evidence at all’, Dawkins throws the baby out with the bath water. In his desire to support his philosophical position that there is no God performing miracles, he has committed a sin against science in turning his eye away from interesting and puzzling data.

Dawkins has also thrown out the evidence of medical science, in order to support his own philosophical position, his own story. While medical scientists have said that in sixty-six cases the result was so unexpected that others have called it a miracle, and in over two hundred cases the cure is unexplainable by medical science, Dawkins says that ‘things could have gotten better anyway’.

Here is a scientist not accepting scientific evidence and judgment because it appears to go against his philosophical position that there is no God. He puts himself in a similar position to creationists who do not believe the scientific evidence for evolution based on the philosophical position that there is a God. This is scientism, not science.

Unfortunately, this sort of posturing reduces the credibility of cutting edge fringe science, where I believe some of the most interesting and important questions of our time are being addressed. Research into the paranormal, including alleged communication from the dead, reveals that a large number of cases can be explained by ordinary causes, but a small number exist for which the usual explanations do not seem to apply. For example, increasingly complex crop circles, or crop formations, have been appearing mostly in the fields of south-west England each summer for about the last twenty years. There is no question that some crop formations are made by humans, but there are a few circles for which a human source seems highly improbable. These include the Milk Hill formation, the Stonehenge formation, and in 2007 the East Field formation. The first appeared overnight in pouring rain, with no muddy footprints evident. The second appeared in a twenty minute period at 6:00 pm on a summer Sunday afternoon with tourists and motorists all around. And the last huge formation appeared in a field being monitored all night with light sensitive and infrared cameras. There is as yet no definitive answer to the cause of these formations. They are however worthy of further exploration.

The Science of Introspection

Then there is another area which seems to be resistant to scientific enquiry — aspects of reality and of human experience involving the subjective world of feelings, thoughts and values. For this too, appropriate methodologies

are being developed, combining first person (subjective) and third person (objective) observations. The science of psychology has accepted first person methodology and systemized it through the use of standard questions on a scale. Such scales allow different researchers to know that they are studying things in the same way, by asking the same questions. Consistent criteria are developed for applying labels and descriptions to first person reports. The Beck Depression Scale, for instance, includes items about bodily functions (sleep, appetite, bowels); behaviour (decrease in activity, avoidance of others); and thoughts and feelings (lack of experiencing pleasure, thoughts of hopelessness). Scores based on first person reports are used to distinguish and label clinical depression, and also to determine the effectiveness of various interventions based on the change it causes in Depression Scale scores.

Dr Bruce Greyson, a Professor of Psychiatry in Charlottesville, Virginia, has developed a scale for the near death experience (NDE) which is used to measure the kind of experience a person has: ²

- * feeling very comfortable and free of pain
- * a sensation of leaving the body, sometimes being able to see the physical body while floating above it
- * the mind functioning more clearly and more rapidly than usual
- * a sensation of being drawn into a tunnel or darkness
- * a brilliant light, sometimes at the end of the tunnel
- * a sense of overwhelming peace, well-being, or absolute, unconditional love
- * a sense of having access to unlimited knowledge
- * a life review, or recall of important events in the past
- * a preview of future events
- * encounters with deceased loved ones, or with other beings that may be identified as religious figures

Dr Greyson has pointed out that although electrical stimulation of a particular area of the brain results in effects or experiences similar to those reported in near death experiences, this does not mean that all NDEs are the result of such stimulation, and thus a kind of illusion.

Introspective Skill

The validity of such scales — their ability to measure what they purport to measure — depends on the ability of the person to introspect, to be aware of and able to report on their inner experience. A science of introspection is slowly developing, but the contemplative spiritual traditions have already developed a rich language to describe subjective experience.

Recent advances in the neurosciences have indicated that the brain has much more plasticity than was previously thought. Neural connections continue to form into old age, and even new brain cells can grow. Traits that were assumed to be fixed are now seen as malleable. Mental exercises and changes in the environment can affect traits and functioning. This finding supports the approach of the contemplative traditions, which have supported disciplined meditative training to bring about substantive changes in consciousness, including emotions. Maxwell Cade, a yogi, scientist, and the father of biofeedback in England developed a way to measure the brain waves of higher states of consciousness using a type of EEG known as the Mind Mirror, and he discovered a common pattern which appeared regardless of theology, belief system, technique, or methodology. He called this pattern the ‘Awakened Mind’.

Where is Science going?

There is much happening in the world of science, even if some of the most interesting work is labeled fringe science, which inevitably at some point will become mainstream. How

soon that happens depends on the addition of new actors and new actions to the acceptable narratives within various fields. Mainstream university work and resultant publications are funded by a granting process which supports the accepted stories in each field of science. In addition there is cutting edge research and publication by specialists willing to take more chances. Both established names in the field and younger scientists carving out alternative careers are doing work in privately funded research organizations such as the Institute of Noetic Sciences. And finally there is a large community of interested people connecting via the internet, willing to consider a wide range of possibilities and their implications, to entertain the possibility of new story lines.

I believe that the internet community is a potent force in changing the stories we allow into our frames of reference. Online conversations occur between thoughtful

people who look at the world with curiosity and an openness to new stories. Ideas now are not only percolating downward from university laboratories, but also upward, suggesting possible areas for research, and this can only be for the good. After all, as Isaac Asimov once said: ‘The most exciting phrase to hear in science, the one that heralds new discoveries, is not Eureka! but rather, *hmm.... that’s funny....*’ ✨

Roseanne DeBats is a professional psychologist and a member of Adelaide Lodge.

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This was written by the physicist and philosopher David Bohm for a memorial service for one of his old classmates in 1981. It was later read by Bohm’s wife at her husband’s funeral.

In considering the relationship between the finite and the infinite, we are led to observe that the whole field of the finite is inherently limited, in that it has no independent existence. It has the appearance of independent existence, but that appearance is merely the result of an abstraction of our thought. We can see this dependent nature of the finite from the fact that every finite thing is transient.

Our ordinary view holds that the field of the finite is all that there is. But if the finite has no independent existence, it cannot be all that is. We are in this way led to propose that the true ground of all being is the infinite, the unlimited, and that the infinite includes and contains the finite ...

The field of the finite is all that we can see, hear, touch, remember, and describe. This field is basically that which is manifest, or tangible. The essential quality of the infinite, by contrast, is its subtlety, its intangibility. This quality is conveyed in the word spirit, whose root meaning is “wind” or “breath”. This suggests an invisible but pervasive energy, to which the manifest world of the finite responds. This energy, or spirit, infuses all living beings, and without it any organism must fall apart into its constituent elements. That which is truly alive in the living being is this energy or spirit, and this is never born and never dies.

Forms are Many, Life is One

Wallace Slater

Reprint from the journal *Theosophy Science* September Quarter 1982

This paper is based on some fundamental ideas to be found in the writings of H.P. Blavatsky and in the Mahatma Letters.

Form Building

The theosophical view of the evolution of forms at all levels, physical, emotional, mental and spiritual, is that there are formative impulses behind creation to give meaning and purpose to the evolutionary process. Scientific philosophers like Kelvin van Nuys have claimed that ‘good purpose is prior to existence and not just a by-product that turns up in the process’.¹ Van Nuys’s thesis was that there is value in the process of creating cosmos from chaos and that therefore cosmos is already there in chaos as, what I have called, formative impulses.

Archetypes

HPB spoke of archetypal forms, taking the word archetype from Plato: *arche* meaning basic or old, *typos* meaning form or pattern. Plato used this word to denote basic patterns on which all objects of certain categories are built: mineral crystals, plants, trees, fish, animals, etc. An archetype is an abstract mental concept that precedes the objective manifestation. One suggestion is that the archetype is at the higher mental level, the so-called *arupa* or formless level. It would then be an abstract principle from which different forms could crystallize out at the lower mental level. Archetypal Man is “heavenly man”, Adam Kadmon of *The Secret Doctrine* [and the Kabbalah].



... as soon as DARKNESS ... has disappeared in its own realm of eternal Light, leaving behind itself only its divine manifested Ideation, the creative Logoi have their understanding opened, and they see in the ideal world (hitherto concealed in the divine thought) the archetypal forms of all, and proceed to copy and build or fashion upon these models forms evanescent and transcendent.²

Occultism teaches that no form can be given to anything, either by nature or by man, whose ideal type does not already exist on the subjective plane. More than this; that no such form or shape can possibly enter man’s consciousness, or evolve in his imagination, which does not exist in prototype, at least as an approximation.³

The above refers to an innate Divine Intelligence at the highest level of our septenary system, the Cosmic Ideation, by which the Dhyani Chohans supply the archetypal patterns for every form that is to exist or be created. The term Dhyani Chohan refers to those spiritual beings said to be charged with the supervision of a planetary system. This is personalizing them but I suggest we should hold the idea more loosely as an impersonal motivating principle similar to the word Intelligence in the phrase ‘Intelligence came first’.⁴

In Man, the perfection we are to achieve as forms is already present in the Eternal, but

the future is not predetermined. That may appear a contradiction so let me put it another way. All forms partake of the nature of reality from which they were projected, but variety (forms are many) allows choice. To be meaningful forms must have variety. My theme is that behind the wide variety of forms, at all levels — mental, emotional, physical, both individual and group — there is a Cosmic Plan. In this plan the archetypes represent perfection. Each form holds within itself the potentiality to express Reality at the level of the form, for all forms partake of the nature of Reality from which they were projected.

Life and Form

The dualist idea of life and form, in relation to one another, implies an ensouling force and a vehicle or instrument for the use, control or direction of that force. This appears in religion and philosophy as spirit and matter, soul and body; in science as force and machine, electricity and electric motor and so on. I suppose the majority of people like to think of themselves as an inner Self that can choose what the body shall do, or more broadly as spirit and matter. In theosophical literature this relationship is much more involved as seen in our descriptions of the so-called constitution of Man. We may have thought of soul and body as an expression of life and form, but this is not necessarily correct, for of both soul and body each has a form, each being an expression of Divine Energy. So we must not be too rigid in separating life and form.

How is this divine energy that I have called Life, harnessed? It is not something extraneous from the form, like water in a bottle, although we sometimes speak of it as if it were, and as if it could be released as one empties water out of a bottle. The better analogy is to speak of both bottle and water as form and of the temperature or heat as the life, because temperature is merely a measure of the rate of vibration of both water and bottle.

Life — let us call it Divine Life to distinguish it from orthodox biological life — pervades the universe as a quality of the material of the universe and so it is harnessed by the co-ordination of matter. In physical matter we can take electricity as an analogous example. Electrons, particles of negative electricity, are everywhere, surrounding every atom. Put certain metals and chemicals in a special relationship, as in a battery, and electrons flow along a conductor. This electric energy can do the amount of work that the form allows. So with life: with a limited outpouring of the Divine Life, the worlds were formed and are ever nourished and sustained. The power behind the forms — the Divine Life — is unlimited, but the amount that can flow is limited by the nature of the form. As the forms develop and evolve, so more life can flow through... So we should think of life being harnessed, not in the sense of the constriction of force, but rather as the creation of right conditions in the form.

The correspondence of life to the archetype of a form may be taken as the three energizing principles: *fohat*, *prāna* and *kundalini*. The use of these terms in theosophical literature indicates that they are various aspects of Cosmic Energy. The following ideas about these three principles have been taken partly from the literature on the subject and partly the result of an attempt to reach a self-consistent theory. In a general sense *fohat* is the vital force of the universe, while *prāna* is vitality as a principle and *kundalini* is sometimes regarded as the fohatic energy of man. In a limited sense *fohat* is the energy of the physical world and the mineral kingdom; *prāna* is the life of living things, and *kundalini* is the creative power of man. However, all three operate at all levels, in all kingdoms and on all planes or fields.

We may say of the three aspects of Cosmic Energy that:

* *Fohat* is the creative power of Cosmic

Thought. It is Divine Energy on every plane since it creates the substance of each plane: 'Fohat digs holes in space'.

* *Prāna* is Cosmic Life on all planes and is the life principle of all the kingdoms.

* *Kundalini* is the latent divine power in all the kingdoms, but only becomes effective in man.

What energy is at the physical level (electrical, thermal etc.) and as understood by science, which equates matter with energy, so *fohat* is at all levels. Similarly, what biological life is at the physical level, so *prāna* is at all levels; and what self-consciousness is for physical man, *kundalini* is at all levels, namely, the creative power.

To summarise, the material of the universe is prepared by *fohat* as packets of energy, from sub-atoms to galaxy. Then (later in time) *prāna* gives life and form. Finally, *kundalini* gives purpose and self-consciousness.

Having said forms are many, life is one, I have now given three life principles. The point is that one universal life acts differently according to the form it is using or energizing. In theosophical literature we find the expressions universal consciousness and universal power. These lead us to think of some all embracing terms such as ultimate Reality. For example, the archetype idea suggests a pattern behind the wide variety of forms, that there is a

Cosmic Plan and that all forms are aspects of an inner Reality. The life idea is meant to express the free-flowing nature of something that embraces all forms in a wholeness, a Oneness. Forms cannot exist without life. Conversely, life cannot manifest without a form, hence the underlying wholeness of all manifestation. Another way of putting this is to say that life pervades the universe and is harnessed by the coordination of matter. My suggestion is that life and form are not dual. Philosophically there is but one Reality and there can be nothing outside that Reality. ☒

Wallace Slater was a Senior Research Chemist at ICI in England, a senior member of the TS in England, and a member of the Theosophy Research Centre.

References

1. Van Nuys, K. (1949), *Science and Cosmic Purpose*, New York: Harper & Row.
2. Blavatsky, H.P. (1888), *The Secret Doctrine* Volume One, The Theosophical Publishing House, p. 380.
3. *ibid* p.282.
4. Smith, E.L. (et al) (1975/1990), *Intelligence Came First: Life and Mind in the Field of Cosmic Consciousness*, Quest Books, The Theosophical Publishing House, Wheaton, Illinois.

Slightly edited for length.

As a blind man has no idea of colours, so we have no idea of the manner by which the all-wise God perceives and understands...He is utterly void of all bodily figure... nor ought he to be worshipped under the representation of any corporeal thing...

Isaac Newton: *Mathematical Principles of Natural Philosophy*

Calendar of Events National TS Centres ...



Springbrook Centre, 2184 Springbrook Road, Springbrook, QLD

Springbrook October Event

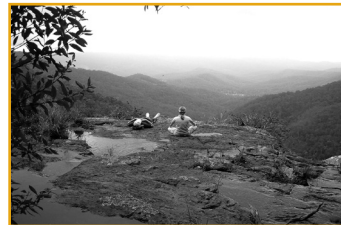
Presenter: Professor P. Krishna, India

Theme: 'Human Transformation and the Enquiring Mind'

Dates: October 6-11 2009, Arrivals 6th October

Departures 11th October

Format: A mix of talks and interactive dialogues



Professor Krishna is Honorary scientist and Fellow of the Indian National Science Academy, New Delhi and in charge of the Krishnamurti study centre at the Rajghat Education Center in Varanasi, India. He retired from work as a professor of Physics at Banaras Hindu University at the behest of J. Krishnamurti who had asked him to look after the Rajghat Besant School in 1986. Professor Krishna is an engaging speaker, who brings to his presentations a passion for education, science and society.

Canyonleigh Centre, Bolitho House, Tugalong Road, Canyonleigh, NSW

Sunday November 8 2009

Theme: 'The Sacred Depths of Consciousness'

Format: Talks and dialogues

Presenters: Dara Tatray and Edi Bilimoria



This day-event will explore evidence from philosophy, science and art to suggest that consciousness contains sacred depths. Does consciousness itself possess some of the qualities normally attributed to God, such as omnipresence, omnipotence and omniscience?

Registration Forms included with this issue.

Visitors are asked to respect the National Council's policy of vegetarian food, no alcohol, no non-medicinal drugs and no smoking at the Section's Springbrook and Canyonleigh Centres.

ANNUAL CONVENTION BUSINESS MEETING OF THE THEOSOPHICAL SOCIETY IN AUSTRALIA

The 2010 Convention Business Meeting of The Theosophical Society in Australia will take place at 9.30am on Sunday 17 January 2010 at the Australian Maritime College, Launceston. This notification is provided in accordance with Rules 12 and 13 of the Rules of The Theosophical Society in Australia:

Agenda

Roll Call of Voting Delegates and Proxies

Confirmation of Minutes of 2009 Convention Business Meeting

National President's Report for the Year Ended 31 August 2009

National Treasurer's Report for the Year Ended 31 August 2009

Financial Statements and Balance Sheet for the Year Ended 31 August 2009, and Auditor's Report thereon

Budget for the Year Ending 31 August 2010

Appointment of Auditor

Announcement of Newly Appointed Officers

Announcement of Ballot Results:

- Election of State Representatives: Queensland, South Australia/Northern Territory, Tasmania

Vote on Notices of Motion

Place and Time of Next Convention

Resolutions of Goodwill

Any Other Business



Erratum

November 2008, Volume 72, Number 4 page 124

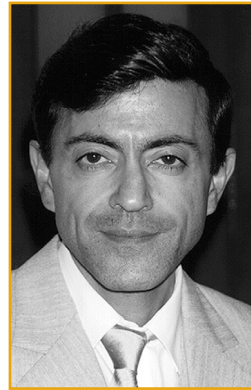
On the advice of our solicitor, resulting from a query from the national Executive Committee, the term of office for the election of the National President is (3) years not (2) as previously announced. Therefore Dara Tatray was elected for a (3) year term from the Convention Business meeting in January 2009. The election was for a full term and was not filling a casual vacancy.

National Secretary

The Theosophical Society in Australia
2010 Annual Convention
Australian Maritime College, Launceston
16-23 January 2010

“Divine Wisdom in Art, Science and Philosophy”

Guest Speaker: Edi Bilimoria
Education Coordinator, TS in Australia



PROGRAMME: The Convention programme will appear in the November 2009 issue of the magazine.

EARLYBIRD REGISTRATION FEE: \$20 per person for day and live-in registrants to be received **no later than 1 October 2009** by the Convention Secretary. (Fee non-refundable)

REGULAR REGISTRATION FEE: \$40 per person for day and live-in registrants if received after 1 October 2009 by the Convention Secretary. (Fee non-refundable)

REGISTRATION FORMS: Enclosed with this magazine.

COST: \$69 per night, including all meals and sessions.

DISCOUNT: 3 Nights free for all Queensland and Western Australian members **only** - if staying for at least six nights.

2 Nights free for all other states - if staying for at least 6 nights.

PAYMENT: Full payment for Accommodation should be received at the National Headquarters by **20 November 2009** in order to secure a room at the College.

SCHOLARSHIP: Members of Hobart, Launceston, Canberra, Newcastle and Ather-ton Lodges may enquire at their local TS centre to receive the Edna Jenks Scholarship. Applications should be received at the National Headquarters by **Friday 25 September 2009**.

FURTHER ENQUIRIES: Zehra Bharucha, Convention Secretary, TS National HQ.
Tel: 02 9264 7056 (Mondays to Fridays 9.00 am -12.00 noon) Email: tshq@austheos.org.au

New Acquisitions to the Campbell Theosophical Research Library and Archives

The following publications have recently been purchased for the Campbell Library in support of the third Object of The Theosophical Society, which is to investigate the unexplained laws of nature and the powers latent in the human being.

Sir Arthur Conan Doyle (1926/2008) *The History of Spiritualism* Volume One, The Spiritual Truth Press, London.

A number of the trance mediums, phenomena and interested scientists with which H.P. Blavatsky was familiar are covered in this history, the second part of which was already housed in the Campbell Library. Sir William Crookes, Alfred Russell Wallace, the Eddy brothers, Stainton Moses and other dramatic personae familiar to readers of Madame Blavatsky's works are brought to life in Conan Doyle's fascinating history.

Stacy Horn (2009) *Unbelievable: Investigations into Ghosts, Poltergeists, Telepathy, and Other Unseen Phenomena, From the Duke Parapsychology Laboratory*, Harper Collins, London. It was reported in *Unbelievable* and in *Extraordinary Knowing* (listed below), that after reading J.B. Rhine's critical report on the activities of a medium much lauded by the American Society for Psychical Research, Arthur Conan Doyle took out a paid advertisement in a Boston newspaper to say that 'J.B. Rhine is a monumental ass'. Nonetheless, Rhine went on to found the Duke Parapsychology Laboratory, also known as the Rhine Research Laboratory, at which Rhine, his wife Louisa, and other colleagues conducted the experiments published in 1934 in the ground-breaking monograph *Extra-Sensory Perception* (thus coining the term).

Elizabeth Lloyd Mayer (2007) *Extraordinary Knowing: Science, Skepticism, and the Inexplicable Powers of the Human Mind*, Bantam, New York.

Dr Mayer was associate clinical professor of psychology at University of California, Berkeley, and in the psychiatry department at University of California Medical Centre; a once confirmed skeptic who discovered, to her surprise, a huge bank of largely ignored evidence-based research into the paranormal and psychic phenomena. This is a highly readable and informative survey of material that could be highly recommended to any TS library.

Dean Radin (2006) *Entangled Minds: Extrasensory Experiences In a Quantum Reality*, Paraview Pocket Books, Simon & Schuster, New York.

Dean Radin's book may also be recommended without any hesitation. Radin is Laboratory Director at the Institute of Noetic Sciences, an accomplished violinist whose interest in psychic phenomena and the powers latent in human beings took him away from a career in music (having first spent twenty years as a soloist) and led him to his present career as a distinguished psychic researcher and bestselling author. The latter distinction does not always coincide with quality research, but in this case it certainly does.

Charles T. Tart (2009) *The End of Materialism: How Evidence of the Paranormal is Bringing Science and Spirit Together*, New Harbinger Publications, Oakland, California. This is an excellent work based on a lifetime of research, surveying the state of parapsychology research and the implications of current findings. It comes with a useful list of parapsychology websites and peer-reviewed parapsychology journals available online. Charles Tart is a pioneer in the field of transpersonal psychology, whose interest in the nature of consciousness evidently knows no bounds. Another worthy addition to any TS library.

NEWS and NOTES

World Congress Rome

As mentioned in a previous issue, the next Theosophical World Congress is to be held in Rome, from 10 to 15 July 2010. The theme for the Congress is 'Universal Brotherhood Without Distinctions: Road to Awareness'. Registration is Eur50 per person. Accommodation and meals will be Eur88 per person per day in a double room; or Eur110 per person in a single room; and Eur70 per person in a room with three beds. A number of members from Australia may choose to travel together and perhaps do a little sight-seeing before or after the Congress, but arrangements have yet to be made. Anyone interested may contact the National President for further details to be passed on when available. Registration forms will be available within the next few months.

School of the Wisdom Adyar

9 to 15 November 2009 "Intuitive Awareness — A Silent Retreat": Director, Venerable Ajahn Sumedho Bhikkhu, head of the Amaravati Buddhist Monastery in West Sussex, England.

16 to 27 November 2009 "Brain, Consciousness and Transformation": Director, Dr Satish Inamdar, Director of the Bangalore Education Centre, Krishnamurti Foundation India.

November 30 to 11 December 2009 "Human Evolution and Spirituality": Director, Professor C.A. Shinde, Director of the Adyar Library and Research Centre and a National Lecturer for the Indian Section.

5 January to 4 February 2010 "Theosophy and its Practical Implications": Director, Colin

Price of the Blavatsky Trust in England and a former General Secretary of the English Section.

Classes generally run from 8.30 to 11.00am and 3.30 to 5.00pm Monday to Friday, preceded by a half an hour meditation commencing at 8.00am.

Applications to attend the School of the Wisdom must be made to the International Secretary. The application form, and more information about each session of the School, may be found at <http://www.ts-adyar.org/school.html>. Please contact the National President for a referral to the Accommodations Officer if accommodation on the compound is required, or if you wish to visit Adyar for any other reason.

University Prizes

The Theosophical Society in Australia donates an annual prize of \$1500 each to The University of Sydney, and La Trobe University Bendigo, for an outstanding Honors, Masters or Doctoral thesis on the perennial philosophy and related themes. This year's *Theosophical Society/La Trobe University Bendigo Philosophia Perennis Prize* went to Aminah Smith for her undergraduate essay, 'What Hast Thou Done?: The Australian Aborigine and the Fate of the Nomads'; and Dean Hadlow for his postgraduate essay, 'The Sad History of Silence'.

Visitors to the National Headquarters

We were delighted by the visit of Bernice Croft, the International President's Secretary, on the way back to her native New Zealand for a brief stay there, before resuming work

at Adyar in November. Mrs Croft has now completed eight years service at the International Headquarters, during which time, in addition to her work for the President, she has been of great help to a large number of visitors to the compound.

Special Offer

Since distances are considerable, those from Western Australia and Queensland staying at the 2010 Launceston Convention for six nights or more will receive three nights accommodation free of charge. Members from other states will receive the customary two nights free.

Plain English Prize

With a great deal of our literature hailing from Victorian or pre-Victorian times, and then peppered with Sanskrit terms, plain English is something of a rarity in The Theosophical Society; adding to its charm in some respects, but not necessarily getting the message across as clearly as possible today. One of the best examples of a less than clear sentence hails from *The Secret Doctrine*, where it seeks to simplify a complex subject by saying ‘as Globes, they are in CO-ADUNITION but not in CONSUBSTANTIALITY with our Earth and thus pertain to quite another state of consciousness’. The latter part of that sentence does clarify things, to my mind, but would it not have conveyed the meaning even better to have said that the Globes are connected with one another, but are not of the same substance, and pertain to another state of consciousness? At least I think that is what is meant. Perhaps you have a favourite abstruse sentence from the literature circulating around the TS. If so, please send in your best examples, with a brief supporting comment and an example of how the same thing could have been said more clearly in contemporary language, and a distinguished international panel will award a book voucher for the best example of the most difficult sentence.

Important Reminder to all Lodges/ Branches

Would all Lodges and Branches please send to the National Secretary or the Assistant Secretary the results of their annual elections of officers and financial statements of accounts as soon as this information becomes available. In addition, Lodges and Branches are requested to send in promptly their Annual Reports on the form provided by the National Headquarters. Records at the Headquarters and the Section Directory, which is printed in each issue of *Theosophy in Australia*, can then be updated. Some information from the Lodge/Branch Annual Reports will form part of the National President’s Annual Report.

Submissions to State Representatives for next National Council Meeting

A reminder to all Lodges/Branches, Certified Groups and Members that any submissions to the National Council on matters of concern should be forwarded through your State Representative, preferably by mid-November, to allow circulation of any material to the National Council members prior to its meeting in January 2010.

What’s Next?

An item in *New Scientist* 22 August 2009 points out that over half the entries in Max Brockman’s *What’s Next?*, concerning the next big things in science, deal with the human brain or neuroscience.

Although much neuroscience is disappointing in that it still treats consciousness as a by-product of brain chemistry, the implications of a great deal of that science lend significant support to our third Object, as does the cutting edge of consciousness research. ✨