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Vitalism revisited.

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Vitalism revisited: only connect

I recently read a book on the energetics of the bodymind and bodywork. Did I hear you groan? New Physics and physical therapy again! More vibration-speak and quantum-babble! But patience dear reader, for despite its title, 'Energy Medicine' is no New Age flight of fancy; in fact it explodes the 'subtle energy' notion. James Oschmannⁱ is the author and he describes a burgeoning scientific interest in the rhythmic energetics of life; theoretical perspectives he believes throw new light on the physics of human wholeness. Maybe some of Oschman's conclusions strain the evidence, and admittedly much of the background research was published in arcane journals; still, all the primary references are there, should you want to go to the sources, for Oschman's work is scholarly as well as highly readable. He has obviously talked to healers and bodyworkers as well as physicists too and, thankfully he keeps the polemic on soft peddle, providing quite a few 'ahah' moments without having to mystify or brow-beat the reader. This is no mean feat in a territory where hype, fuzzy thinking and misplaced concreteness generally rule. Why should this be?

The problem with energy-speak is that it usually entices us into shallow science at the same time as it trivialises the spiritualⁱⁱ. Can it be meaningful to conflate the languages of physics and religion? Surely 'quantum spirituality' is the ultimate triumph of reductionism! Yes, the expectation in our part of the world is that science will get cleverer and cleverer until one day it will deliver answer to every possible question: life, the Universe, everything. Can anyone who thinks and feels really be comfortable with that terrifying assumption? No. Yet do we not at the same time wish it were so; and that the human thought could comprehend the mysterious powers of the Universe? Put like that Science becomes the ultimate Enlightenment control-freakery; which is possibly why we bemoan the journey science is taking us on even while we grudgingly worship at the techno-shrine. Because nowadays, we tend to value the intellectual and the rational rather less and are seeking ways back to the body.

Is Oschman therefore delivering the latest despatches from the campaign to make the soul a scientific phenomenon? Possibly so, for his particular set of leading edge theory has never before never been brought together before and there is no denying it is an exciting constellation of ideas. And does this herald a single theory uniting science, art, medicine, spirituality? I suspect there are those who might hope for a unified theory of everything. Surely this is a dangerous implication for Science as it embraces whole systems, chaos and emergence. I doubt that many

of us any longer assume that scientific explanations are the only valid ones; because we are surrounded by a world science only vaguely helps us grasp; nor can we understand ourselves in any hard scientific sense. Yet there is a tenacious assumption in our culture that we should make sense of existence in 'scientific terms'; and clearly this book provides an important new story about the physics of the organism. But what I like about it most is the way it uses science to subvert reductionism. So has JO found a way to make a truce in the ancient battle between mechanism and vitalism? What a triumph that would be for a Third Way if it science actually makes us revalue the *intelligence of the body*.

Modernity expects people to act rationally and avoid superstition. In the Enlightenment scheme of things, superstitions are Bad, but in reality most deeds and beliefs are driven by imagination and faith rather than rational thought. Modernity bracketed off much that is essential and passionate, leaving only what could be reasoned about. This short-changed the breadth and depths of our being, for humans need stories to live by and are subject to darker, higher and deeper drives than the conscious mind can comprehend. Perhaps this sounds too psychoanalytic, but no matter what you make of Freud and Jung, our lived body experience makes little scientific sense: growing and changing, ailing and aging; the body's yearnings and ecstasies are not rational. Nonetheless our culture prefers explanations to have the stamp of science, so we lapse into its forms of speech when striving to make sense of experience. Yet the Sacred still finds ways to draw attention to itself. So is it wish fulfilment or part of a deep process of recovery from Modernity that drives us to re-invent Soul and Spirit in the guise of science? The Gaia hypotheses, the Anthropomorphic Principle, the Participatory Worldview, Transpersonal Psychology; the way we speak about 'life energy' as though it were like a physical force? Are not all of them ways of holding on to essential, irrational beliefs? We need these paradoxical PostModern 'scientific' superstitions. They appeal to our aspirations as well as our insecurities; gratify innermost longings and impel ethical and humane conduct. So even though the irrational can lead us into violence as well as into love, we fool ourselves if we think we can jettison superstitions selectively. Those who adopt an ultra-reductionist worldview (a superstitious act of faith if ever there was one) may gain an explicable, ordinary, controllable world but they are left abandoned in landscape where nothing is sacred. Perhaps those with affluent lives, untroubled by war or disease can maintain this illusion; but real life is uncertain and, because in reality we are vulnerable, dependent on others and limited in our abilities, somehow, life's magic and mystery will find their way back in.

Is this one reason why complementary therapies are so popular? The research evidence doesn't account for it, so it is not an entirely rational; complementary therapies clearly do provide special ways of acting out our hopes and intentions, so they are superstition-like; and their fundamental

principles - wholeness, connectedness, relatedness and meaningfulness – though we dress them up as science, also have obvious religious undercurrents. I am not denying there is something concrete going on as well, nor that we should try to understand in it in scientific terms. That said, our therapeutic work on the body is founded on conviction and experience, not on experimental data. However, since science neither holds all the cards nor can be expected to provide all the answers I think it quite reasonable that some questions should remain open and undecided. Consequently whenever I feel the urge to turn the imagery of traditional medicine and the poetry of relationship into the prose of science I go out for a run and hope it will go away. On the other hand, as an academic and an integrative doctor I also need that same prose to explain my subject area and legitimise my claim to effective practice. The postModern juggling act entails retaining the sacred Art of Medicine while practicing in ways that respect science and speak its language. Can we square these circles: rational scientific theory with the irrational bodymind; subjective experience with positivist explanations; rigour with relevance? This is where Oschman comes in.

Science implicitly sees life and consciousness as clever properties of special kinds of matter. Physicists for their part hold matter to be energy, though they have not yet claimed to explain life, let alone consciousness in these terms. The idea that something called 'energy' is a way of explaining everything (from the experience of a complementary treatment and the reason for its effectiveness, to the therapeutic relationship, emotions and intuitions, even spirituality) has nothing to do with science; whatever claims have been made in the past, the notion that 'energy' can explain everything, suggests it explains nothing. The use of science-like words to support unscience-like ideas has a long and confusing history. The 'subtle-energy' story in particular, wants the cake of scientific provenance, while also eating it up by claiming ancient lineage and spiritual relevance, assuming as it does (I think incorrectly) that concepts like prana and chi, actually translate as 'energy' and can therefore be thought of as something like electro-magnetism. So energy-speak if we take it at face value, has misunderstood science and at the same time by scientising traditional cultures, patronises them and sells them short. Yet there is something important and meaningful about this way of speaking, because it strives in its fuzzy way to express relatedness, holism and interactivity; to capture felt experience of aliveness and connected-ness to other people and a living world.

In fact this style of 'energy speak' has distinct Western roots in the European school of philosophy known as Vitalism. Vitalist ideas emerged in the late 18th century at a time when Europe was entering the Age of the Machine and they represented an antidote to the emerging technological worldview. This perspective was under-pinned by recently discovered laws of motion, laws that governed an apparently machine-like universe into which the new breed called Scientists (whose

task it was to make sense of the cogs) peered as though detached from it. In the wake of Descartes, they wanted their investigation of the material world to be unsullied by qualities and feelings: to be objective. The body became just one more object in a world of other objects from which soul along with other intangibles and imponderables had somehow vanished. It disappeared from the body too. These revolutionary notions implied that the material world could and should be taken apart to render up its secrets and, that the body was no different - a machine to be analysed in ever more microscopic detail. However, some mainstream natural philosophers, (they were not yet called Scientists) appalled by this paradigm, insisted that whatever its material nature, some kind of 'vital force' was required literally to *animate* living substance. These early Vitalists had different names for that force, but all agreed the vital force was the source of life, health and healing. At one extreme, these ideas applied to the art of medicine gave rise to therapists in the tradition of Franz Mesmer who claimed they could perceive 'animal magnetism' or like Baron von Reichenbach transmit 'odic force' and use it to cure.

Throughout the 19th century doctors on the other hand applied the new reductionist, mechanical scientific method to medicine and categorised diseases according to cellular pathology. Mainstream medicine applied biology and incorporated germ theory and aseptic surgery until, as the 20th century dawned, it actually developed some effective, rational treatments. The increasing success of applied bio-science had the incidental effect of discrediting Vitalist notions; yet as this ever more secular scientific revolution rolled on, it drew back the curtains on an unimaginably complex organism. It revealed too, an immense and awesome Cosmos, the vast scale of evolutionary time and an unsuspected world of invisible electro-magnetic fields. Some believed these forces were the 'life force' itself and the late 19th. Century saw a burgeoning industry of electrical and magnetic devices and therapies. (Still and Palmer incidentally were both magnetic healers before they invented osteopathy and chiropractic). Ted Kaptchuk has called this quasi-science Low Mesmerism, pointing out that the more mental aspects of Mesmer's work developed into hypnosis, and by direct descent the psychotherapies; which he identifies as High Mesmerism. However, as science quantified the electrical properties of nerve and muscle it soon became apparent that that these fields and currents are the effects of living tissue rather than the source of life itself. Therefor, in an age when objective measurement meant everything, science junked the whole notion of vital energy. Yet for many people, the jury was (and still remains) out, perhaps because in seems so evident that there is something ineffable about life and nature, the indescribable complexity of the organism and the mystery of consciousness. But is it reasonable for science to try and 'eff' the ineffable?

Jim Oschman tries and to a surprising extent succeeds in using the language and images of science to generate new metaphors about life and consciousness. Here is a précis of what he presents:

Cell and molecular biologists have made a profound discovery that is accelerating our comprehension of life at the level of whole systems. Previous images of the organismas being built up of parts--have concealed the most significant attribute of living matter: its continuity. The major structural and functional domains of the body are the connective tissues, the cells within them, and the cytoskeletons, nuclei and genetic material within the cells. We now have precise and detailed pictures of the interconnectedness of these domains, and the assembly is best described by a single word, continuum. Continuity within the living body has long been a foundation principle for a variety of schools of hands-on therapy. Structural and functional continuity has now been confirmed and appreciated by science. Continuity in living systems is simultaneously mechanical, structural, regulatory, and energetic. A second key to the emerging concepts has come about from recognition of the crystalline properties of living tissues. Molecular arrays or crystals are the dominant structural feature of living Crystallographic techniques such as X-ray diffraction have been essential for determining the structure of nerves, muscles, cell membranes, and connective tissues. From the biophysical perspective, molecular arrays or crystals cannot be described in terms of their constituents alone. Crystals have important vibratory characteristics that arise as collective properties of the whole system. When a crystal is broken into its constituents, these unique vibratory phenomena disappear. This is why collective properties such as functional organization and consciousness have been elusive for those who study the system's components piece-by-piece.

Oschman makes the point that an intricate traffic of biochemical, structural and electrical information must integrate and shape the organism. Such a flow of organising information resembles what the Vitalists imagined as vital energy. But he emphasises that rather than involving a single, distinct life force, this information flow is modulated not only through the organism's electro-magnetic flux and in clouds of neuro-receptor traffic, but also as mechanical and rhythmic impulses of sound, heat, gravity, elasticity, pressure. Science is now in a position to explore how such a 'flow' of information might be encoded in this living flux. Oschman describes the participatory organism:

"What we refer to as health is when all these systems both known and unknown are functioning collectively, co-operatively......The solid state, electronic-, photonic and

vibratory properties of this living matrix continuum play key roles in the integration of function including injury repair and defence against disease..... A debate about whether there is such a thing as 'healing energy' or 'life energy' has been replaced with study of the interaction between biological energy fields, structures and functions....... Minute currents flowing through tissues must create magnetic fields. There are now instruments sensitive enough to detect the bio-magnetic fields produced by the different organs...photometers and thermographs of parallel sensitivity allow us to detect almost infinitesimal variations in light and heat emanating from the body."

Though the twentieth century laboratory failed to isolate 'vital energy', the belief in it has persisted. Until now however, Modern science has viewed Vitalism and 'traditional' therapies apparently based on the idea of 'life force' as a throwback. Biomedicine on the other hand despite its awesome technical achievements, has provided no stories to live by, or worse its implicit stories alienate and de-humanise. To the stereotypical scientific gaze (which is itself a caricature, for as Oschmann explains Science has gone immeasurably far beyond this ignorance)) the human body is just an assemblage of cells stacked in accordance with their nuclear codes, the cells are bags of chemical reactions, the body, a collection of tubes pouches and fibres controlled through a telegraph-network nervous system whose operator is the brain. In this ultra-reductionism purposeless cosmos, consciousness is an electrical secretion of the brain and our planet, a random event where life spawned accidentally. This backdrop to Modern times is challenged by an emerging participatory, ecological worldview that sees living beings as embedded in universal processes that are permeated by mind^v. This worldview speaks of flows and qualities, is concerned with process and relatedness and feels passionately that inner and outer worlds interpenetrate. It is a perspective that provides a much-needed counter-balance to the worst excesses of reductionist science; and, though mostly inarticulate, it is the hidden impetus towards 'natural-ness' and compassion for the planet and our fellow-beings. It is the most recent face of the Romantic philosophy which always tried to antidote Modernity. But ought it to be dressed up in scientific clothing; can it be? According to Oschmann it can now. This flowing unitary worldview has never fitted the technical boxes provided by science even though they could be shoe-horned into them. The Vitalists and Magnetic healers for example used crude representations of a deeper more complex medieval, imaginative and romantic picture that speaks a language of qualities, elements and ethers, just as the language of TCM and Ayurveda do, for they too are the product of a pre-Modern worldview. Yet the emerging body of research mapped by this book gives us grounds for a new and more comprehensive style of Western Vitalism, reborn as Information Medicine. This may prove to be the narrative that bridges between objective medical science and participatory post-Modern healthcare. Oschman again:

Continuity and crystallinity account for the most interesting and subtle aspects of life, and provide a launching pad for a unitary theory of living organization, conscious experience, social responsibility, as well as spiritual and cosmic awareness. British biophysicist Mae-Wan Ho^{vi} and her colleagues have developed an elegant quantum theory that describes the organism as a vibrant sentient whole. Of course, many handson therapists are already aware that virtually any contact with the body interacts with consciousness at a fundamental level. What is new is a precise description of how cognition, structure, and functional regulation are interconnected and

deeply rooted in soma. Key to Ho's theory is the role of the connective tissue as a liquid crystalline material constituting a noiseless excitable vibratory continuum for rapid intercommunication and energy flow permeating the entire organism, enabling it to function and perceive as a coherent whole. Quantum coherence in the living matrix provides a basis for this

unitary theory. Water and vibrations of the crystalline molecular lattices play key roles in energy and information storage, transfer, and release.

Whether or not the participatory cosmos implied by Quantum Realty turns out to be real, the kind of participatory language it creates is at once scientific and holistic. It therefore has the ring of truth and holds out some promise of healing for our fragmented and alienated Zeitgeist: no wonder the New Age has embraced it. Similarly the language of of vitalism has become common currency as a way of speaking about human experience for people whose culture has turned even the body itself into an object. All this has added to a general conviction that traditional and indigenous medical systems must have held on to ways of describing and interpreting the world that could complement Modern medicine's objectivity and determinism. Whether or not this proves to be so, the persistence of the participatory vitalist worldview - despite Biomedicine's substantial influence on everyday beliefs about mind and body - suggests it is still a useful fount of stories about health. Perhaps this is because people in our and other cultures speak of health and illness in a vitalist way; we talk about mind and body with an intuitive sense of their inseparability; we experience how our predicament and our health are entangled. If the language of CAM expresses this felt-sense then that is yet another reason for its popularity. It would also help explain why CAM therapies attract those who feel alienated from Biomedicine and why these approaches can lay claim to being holistic. However, both bio-medical and vitalist accounts can be valid and valuable: the vitalist story is about the body-mind experienced from the inside; Biomedicine's of the body as an object. There is no conflict here unless, confusing the map with the territory, we fight over which is 'real' instead of understanding that both can be true. And this is where I think Oschman may be overstating his case.

The connective tissue is not only the organ of form, it is also the organ of formation. Here we are referring to the process by which the living body is continuously reorganized at a rate that approaches the frequency of sound. The quantum coherence phenomenon, as described by biophysicists may be the origin of Rupert Sheldrake's morphogenetic field^{vii}. It is a source of measurable light emissions from living systems. Finally, many leading scholars recognize that the entire cosmos is alive at a foundational level. Quantum coherence provides a basis for the participation of the organism in the larger schemes of cosmic metabolism and evolution. We are going far beyond recognizing why conventional and complementary medicine have seemed so detached and alienated from each other. We are witnessing a major step in the evolution of our species as we become cognizant of the organizing principles of life, our cognition of our aliveness, and cosmic consciousness. These principles emerge from the combination of insights from hands-on bodywork and movement techniques, modern science, and the wisdom of indigenous cultures from around the world.

"Modernity" and "post-Modernity" are terms commonly used when discussing current or recent tensions and transitions in our culture. Modernity entails a set of beliefs, generally implicit, that scientific understanding drives human progress by increasing our technological control of the world. Generally speaking, Modernity favours a single way of explaining the world. Post-Modernity says the world cannot be understood in terms of a single framework, but rather only by examining multiple perspectives and accepting a (possibly disjointed and often uncomfortable) plurality of values and beliefs. Post-Modernity is consequently suspicious of Modernity's notion that the scientific worldview is the defining characteristic of progress, the assumption that progress is implicit in technological advance or that it will lead to increased happiness and well-being. Hence my unease about Oschman's implied theory of everything and – ambiguous though I admit this sounds - my hope that his ideas will help build the bridges we sorely need.

European discourse about 'vital forces' began as an historical reaction against scientific materialism. It aimed to incorporate some remnants of an older style of thought that held on to a realm of qualities and perceptions that science was refusing to deal with. Its resurgence is a response to a 'crisis of representation' in Biomedicine, whose images and metaphors have come into question: the notion of the person as a biological machine whose owner (the patient) takes it to the Doctor for repair; concepts like inexorable progress, absolute scientific truth and medical infallibility. On the other hand we live in a time when health has itself become a metaphor about wholeness. Being unfit, overweight, ill, having a diagnosis have become the new Sins. These

inarticulate assumption represent a kind of new superstition. CAM is well-placed to benefit from our culture's shift away from rationalism and Modernity, but like our culture, it is also prey to these and other new superstitions. It is very PostModern to weave together disparate themes in the way CAM does; to incorporate traditional, mystical and indigenous perspectives alongside the scientific language of psychology, biochemistry and sociology. Yet as knowledge fragments ever more into overlapping parts and it becomes commonplace to voice distrust that science and technology will bring unproblematic progress, is it not paradoxical to explain the human body, soul and spirit in neo-scientific terms?

Medicine is experiencing its own 'post-Modernisation', driven by a renaissance of scientific interest in homoeostasis, consciousness and an acceptance that bio-psycho-social healthcare will depend on multiple narratives. Doctors can hardly fail for much longer, to take the mind-body into account, since science has now shown that psychosocial pressures are met by physiological and potentially patho-physiological responses. Furthermore there are enormous pressures on Medicine to widen its remit, because people (more or less appropriately) expect it to comprehend the human predicament and address society's most pressing human problems; particularly the epidemic of stress and life-style related disease. And the need to become more cost-effective and to 'manage demand' better already means it is having to draw in new perspectives: most obviously the psychological and the sociological. The imperative to drive down costs has caused a temporary revival of radical bio-technical medicine, most notably and ironically in the practitioner-intensive field of psychiatry, which was the original target of Engel's criticism way back in 1970. But there is a season to these things, for the human and professional cost is already becoming unacceptable. Consequently, interest in timeless medical values and the centrality of conscious consultation and appreciation are no longer on the wane. This underlying trend is fueled on the one hand by a backlash against the biologisation of health and the dehumanisation of healthcare and on the other by a deepening understanding of homeostasis and regulatory information in the organism. These strange bed-fellows will together encourage more humane and participatory forms of healthcare. Many conventional doctors now acknowledge Biomedicine's limitations: important signs include a renewed interest in the biopsycho-social modelviii, a widespread concern about physician impairment and the accelerating trend toward co-operation between doctors and practitioners trained in CAM. In addition, the sheer cost of hi-tech medicine and demographic shift have made. Integrated healthcare the buzzword; yet even, so collision is more likely than collaboration when so many very different worldviews and discipline perspectives meet. If we are all to work together, some breakthrough must show Science a less alienated image of the person and, (this is not a separate issue) enable it to make sense of what the 'vital energy' discourse actually means. We need new maps but we must always bear in mind that the map is not the territory. Providing we can avoid falling into this trap, Oschman's may prove to be the story that connects.

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Will we witness the emergence of integrated post modern information medicine as our understanding of health extends into the subtle, but scientifically comprehensible realm of energetics? Can Science help us all realise how the human being entwines mind, body and spirit? Biomedical and CAM approaches complement one another, both in thought and practice and, at their best, CM and conventional bio-psycho-social holistic medicine are striving in the same direction. Convergence seems all the more likely as medical science rediscovers the organism.

ⁱ Oschman JL 2000 Energy Medicine: the scientific basis. Churchill Livingstone, Edinburgh, chapters 3 and

ⁱⁱ LeShan L (1996) Language in the Human Potential Movement, Network 61, Aug 1996, 11-14

Kaptchuck T (1996) Historical Context of Vitalism Ch.3, pp.35-48 in Micozzi M Fundamentals of Complementary & Alternative Medicine Churchill Livingstone, Edinburgh Oschman ibid

^v Peters D. Participate, collaborate, integrate: Modern Medicine's crisis and the search for stories to live by. In Reason, P, & Torbert, W. R. (in preparation 2001). Towards a Participatory Worldview Part 2. ReVision special issue, 24(2).

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