

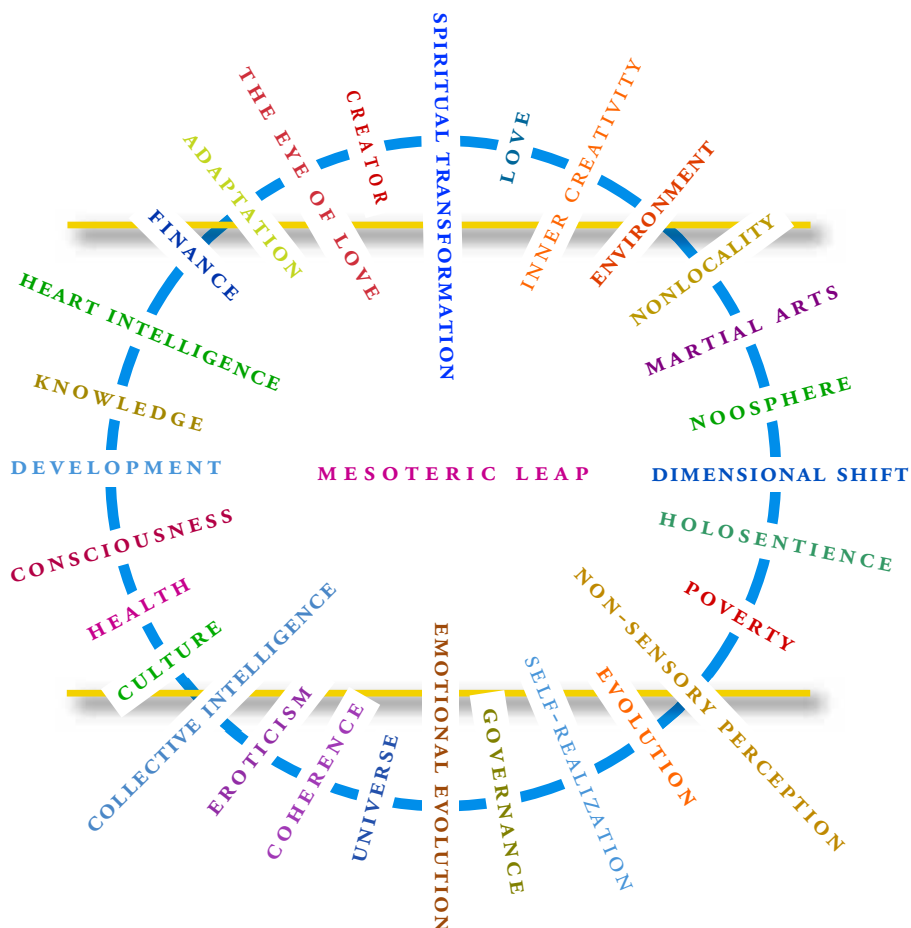


SPANDA JOURNAL

BIYEARLY OF THE SPANDA FOUNDATION

SPANDA.ORG

III,1/2012



CONSCIOUSNESS



DEVELOPMENT 2.0

AN OPERATING MANUAL

EDITED BY
SAHLAN MOMO



SPANDA

CONSCIOUSNESS
&
DEVELOPMENT 2.0



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of Spanda concerning the legal status of any country, territory, city or area or of its attributes, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as 'developed', 'industrialized' and 'developing' are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular individual, country or area in the development process. Mention of firm names or commercial product does not constitute an endorsement by Spanda.

The opinions, statistical data and estimates contained in signed articles are the responsibility of the author(s), including those who are Spanda members or staff, and should not be considered as reflecting the views or bearing the endorsement of Spanda. Neither Spanda nor any person acting on her behalf is responsible for the way in which information contained in this publication may be used.

Spanda makes every possible effort to ensure that the information in articles is accurate. Every reasonable attempt has been made to identify the owners of pictures' copyrights. Errors or omissions will be corrected in subsequent issues. To report errors requiring correction or clarification, please email

Journal@spanda.org.

Submissions may be edited for a variety of reasons, including the need to conform with in-house style.

No part of this publication can be used or reproduced without prior permission in writing from the Publisher.

*Spanda Publishing is an imprint of Semar Publishers,
www.semar.org.*



SPANDA MAINTAINS CONSULTATIVE STATUS WITH THE UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL (ECOSOC).



→ | CONTENT

EDITORIAL - SAHLAN MOMO

The Mesoteric Leap v

STANISLAV GROF

2012 and Human Destiny: End of the World or Consciousness Revolution? 1

ROBERT AUGUSTUS MASTERS

The Anatomy of Intuition: The Everyday Transmission of Nonconceptual Knowingness 13

AMIT GOSWAMI

Inner Creativity: A New Paradigm for Adult Spiritual Development 17

ASHOK K. GANGADEAN

Spiritual Transformations as the wakening of Global Consciousness: a Dimensional Shift in the Technology of Mind 29

ERWIN LASZLO

Two Ways of Knowing the World: Discovering the Reality of Non-sensory Perception 37

ROGER NELSON

Global Consciousness. Evidence for an Emergent Noosphere 41

TERRY PATTEN

Integral Spiritual Practice: Becoming the Ones We Have Been Waiting For 51

DANA TOMASINO

Heart Intelligence and Emotional Evolution: A Next Step in Consciousness Development 57

PAUL VON WARD

Worldviews and Evolution of Human Consciousness 65

GAIL HOCHACHKA

Engaging the Play of Consciousness in Sustainable Development 75

ROLLIN MCCRATY ~ ANNETTE DEYHLE

Coherence as a Catalyst for Personal, Social and Global Health, and the role of the Global Coherence Initiative 83

TERRI O'FALLON <i>Development and Consciousness: Growing up is Waking up</i>	97
FRED ALAN WOLF <i>How to Identify with the Creator of the Universe</i>	105
TORU SATO <i>The Descent and Ascent upon the Ladder of Consciousness</i>	113
GEOFF FITCH <i>Evolutionary Ethics</i>	117
RIANE EISLER <i>Breakdown or Breakthrough: Culture, Consciousness, and Human Development</i>	123
MARC GAFNI <i>The Future of the Holy: From Sex to Eros</i>	131
ANDREW COHEN <i>The Evolution of Enlightenment</i>	141
ALLAN COMBS <i>Coyote Enlightenment. A Story of Evolutionary Spirituality</i>	147
JEFFREY EISEN <i>Clearing to Holosentience and Level II Enlightenment</i>	157
MATTHJIS CORNELISSEN <i>Consciousness, Knowledge and the future of Humanity: A Miniature Overview based on the work of Sri Aurobindo</i>	163
CHRISTOPHER M. BACHE <i>Teaching in the New Paradigm</i>	173
MICHAEL D. AUSTIN <i>Dreaming Earth</i>	181
RAYMOND TREVOR BRADLEY <i>Nonlocality, Consciousness, and the Eye of Love</i>	193
WALTER BAETS <i>Consciousness and Coherence in Corporate Success</i>	207
CHRISTIAN DE QUINCEY <i>Embodied Mastery: Using Philosophy to Improve Performance in the Martial Art of Everyday Life</i>	213
PETER GARETH WALLACE ~ DENNIS P. HEATON <i>A Consciousness-based Approach to Eliminating Poverty</i>	219

JOHN RENESH <i>The Conscious Organization: Workplaces for the Self-actualized</i>	227
VENITA L. RAMIREZ <i>Love, Consciousness & Evolution</i>	231
MARILYN SCHLITZ <i>Emerging Worldviews: Tools of Transformation for Noetic Leadership</i>	241
ANGELA BROWNE-MILLER <i>Survival Instruction: Consciously Adapting and Enhancing Human Consciousness</i>	247
CHRISTOPHER HUGHTON BUDD <i>The Labyrinth of Finance: Consciousness and Money</i>	259
ABSTRACTS :: SUMMARIES	263



UI BACK NUMBERS

spanda.org/publications

- 1 | i, 1. 2007 *Multicultural Youth*
- 2 | i, 2. 2007 *Water-Wise*
- 3 | i, 3. 2007 *Gender*
- 4 | i, 4. 2007 *Death Penalty*
- 5 | ii, 1. 2008 *Hunger. A Clima(c)tic Perspective*
- 6 | ii, 2. 2008 *Education & Development. Africa*
- 7 | ii, 3. 2008 *Indegenous Knowledge (IK)
& Environment*
- 8 | ii, 4. 2008 *Consciousness & Development*
- 9 | iii, 1. 2009 *Human Rights & Security*
- 10 | i, 1. 2010 *Energy & Development*
- 11 | i, 2. 2010 *Microfinance*
- 12 | ii, 1. 2011 *The Placebo Effect*
- 13 | ii, 2. 2011 *Indigenous Culture & Development*
- 14 | iii, 1. 2012 *Consciousness & Development 2.0*



THE MESOTERIC LEAP

EDITORIAL

When the wind of Change blows, some people build walls, others build windmills.

DUTCH PROVERB

Four years elapsed since the publication of our first assessment¹ on the state of consciousness we are leaping in; and again the promising occasion to assemble friends and wayfarers to share findings, insights and visions is at sight. Some of us know each other already since long, some other have not yet met in this textual dimension but share the perspective desire for a better humanity, a better way and place to live – a unified state of consciousness in which the other is no longer ‘other’, but simply our deepest self; where duality is no longer the main bearer whilst oneness is not yet at bay.



SPLIT THE WHOLE INTO TWO TO ENGENDER POLARITIES, *spanda*² endures its course to fulfil its vocation, its call to manifest and to be manifested. Along the same thread, but on a different plane, emerging from the primordial androgynous chasm, each engendered side keeps its heavenly or earthly signature, paralleled – in the twin-fissured dimension – as a pro-tension, a gender advocacy to further differentiate. Having been the first signature gender-wise, the pivotal function of sex is ensuing. The *vocatio* attracting force generates and emanates from the fulfilled world of consciousness, while a counterforce repels it. I am not me, I am you.

“u’r beautiful, show ur light: *nūr* upon *nūr*... do u like to play the game of life? ;-)” “beauty is the light that shines forth from within – i like playing my game with life because we are players.” “LOL, Gr8! ttyl.” “ok, i’m offline, bye bye.”

Which kind of post-internet slang conversation is this? It is up to the individual to inwardly change. The gravity centre of our being – that point from which we chiefly act – and humankind’s centre of ‘gravity’ are tuning in changing their permanent abode. Humankind as a whole is leaping to a new evolutionary stage to permanently dwell in the next dimension of consciousness right in between the two worlds: the *mesoteric* dimension, amid the *exoteric* (*zāhir*) and the *esoteric* (*bāṭin*) planes which links spirit to matter – *barzakh*, *mundus imaginis*, *parāparā* are the similes coming to mind to this respect – the *dash* in the spiritual-material experience

stationed in the true human soul (*rōh insani*) riding both worlds, a soul freed of self-interest – vast as an ocean used to say my mentor³ – the perpetual substantial ontological entity ground of all being, indeed the seed of all expansion (*unmeṣa*). A global expansion of the human consciousness from the individual to the collective realm, from duality to non-duality, from locality to non-locality, from profit to non-profit, in which time loses its grip and everything holds present. It is certainly not an altered state of consciousness, but indeed the real human realm through and from which the true human soul abides, comprehends and intakes the ‘other’ into itself, reconnecting the original link between mind and body. In reality, expansion, indicative of the forthcoming diversity, is itself the contraction (*nimeṣa*) of the awareness of the unity of consciousness. Conversely, contraction, corresponding to the withdrawal of previously emitted diversity, is itself the expanding awareness of the unity of consciousness. Thus, the expansion and contraction of consciousness, brought about by *spanda*, are simultaneously identical with both as, in reality, they are merely the internal and the external aspects of the same energy. The plane, state or dimension, on which this becomes evident, is the mesoteric *locus* where, in active contemplation, self-awareness emerges in consciousness. The mesoteric breadth is indeed an expression of a tendency of the highest consciousness (*uttavipāra*) to express itself in absolute freedom, unbound to a fixed relative form, freed from being just one aspect and at liberty to be all facets at once: formless and omniform, infinite and finite, simultaneously unity and diversity, self-limiting but unchanged.

There is no time, time is a mind construct of memory to enable us to deal with asynchronic events and conventions, to cope with the non-dimensionality of the real human condition. There is more before and beyond the space-time dimension than what we actually imagine or know, time does not exist, is a variable of existence. In the mesoteric present there is no loss of acquired knowledge as a species, nor of memory; action unfolds in the present tense, where *where* is here and not *there*, when you are me and me is you – precisely *here* lays the real human dimension to be; not to be, is not to be *here*.

It is well known that in the ongoing development process, transformations, or stages (*hāl, ahwāl*) are transitory mansions of the same nature of the soul, unexpected and temporary gifts (*barakah*) manifesting on the same experiential plane, but of a different gradations, 'tonality', hue of being – even orgasm is a temporary stage, the shade of a briefly regained unity. By contrast, transmutations, stations, places, states (*maqām, maqāmāt*) are acquired irreversible conditions belonging to the category of 'act', of a 'state' of consciousness that can neither be overcome until fully mastered through its continual possession, nor by its privation; they connote and identify a change of nature of the soul. Growth and development are a modality of action, no growth is possible with[in] inertia. In this respect, the mesoteric plane is a *maqām*, an acquired tonal-spatial organization of the soul that acts as a tensorial membrane, an osmotic *tensorium* metaphorically placed between Heaven and Earth, which maintains the awareness of both planes, and of the interplay of their unique action⁴. In receiving the heavenly 'impressions' (*eidōs, ousia*) the *tensorium* acts as a selective filter: by vibrating at its own frequency it allows to percolate only those frequencies, vibrations, or energies finer or equal to its own vibrational field, indeed it *is* that vibration itself, the individual vibration of life. No *eidōs* can materialize – become matter, integrate with and regenerate Earth – without an action of will. When Will and Action are paired much can be done and accomplished. In this passage, freewill merges and becomes one with the cosmic will (*dhārma*) while the filtered vibrations transmute into earthly teophanic deeds in which freewill and *dhārma* are but one, a symbol-sign, a living sign implanted into matter but active on both planes. If no hiatus is amidst the two and they are really one (in substance?), where the personal responsibility is gone? Are we still responsible for 'our' actions if they are motivated and spring forth from no time and no where? When the energy flows freely through the *tensorium* it manifests itself in informed actions, and aren't these an irreversible entropic utopia, 'sacred' under certain aspect? Once the inner and the outer are in a dynamic equilibrium, once form and content are one, indeed there is no higher responsibility than to be oneself, to be.

Fantasies? *Phantasis* is an image that failed to be, an image gone wrong. Fantasy, conversely from creative imagination, a product of creativity, is made up of images devoid of substance, slipped away from the *tensorium* to dwell in their own realm deflated of consistency, generated either when the original *eidōs* did not adhere to the individual tensorial membrane because tuned to a differing vibrational frequency, or because motivated

and initiated by one of the self-centred collaborative powers (*nafs, nafas; nefesh*) on the earthy side 'beneath' the tensorial membrane. These powers, or energetic pattern or forces, are the expression of the material, the vegetal, the animal and the human realms, or planes of existence in this split dimension, each holding its own agenda and perspective. Depending on which plane we permanently abide – that is our centre of gravity, willingly or unwillingly the permanent station of our soul (the *me*) from we chiefly act – and that bounds the 'me' to that plane, and we will be 'impulsed' from that station. In any case moved and bound to a stage where the 'me' does not have the capacity of being reflexive, to bent back on itself (*reflexus*), to consciously reflect⁵ on itself, a potentiality to be actualized when the *me* is properly installed in the I, at its turn, lodged in the real human soul (*rōh insani*). Sensations, thoughts, feelings and actions not 'received' from the *tensorium*, but the outcome of self-interest drives instead, will unavoidably imprint all ensuing actions with their own specific vibration and leave a residual mark in the inner self and, a consequence of consequences, promote the karmic process⁶. In the practice, as the amount of waste accumulated by the day-to-day self-centred actions prevents fresh receiving, no further advancement is possible if a contemporary inner cleansing process fails to be activated for all the subtle marks left in the inner self by the actions non attuned with *dhārma*. It is thus clear that there are at least two kind of actions under such circumstances: those induced by the *nafas*; and those originated from a 'clean' karma-free source, embedded with spiritual-material energy, clean vessels for consciousness to shape deeds bare of self-interest and of all the possible debris of the purification process. These clean actions, taking place contemporaneously both at individual and collective level, free the individual soul from the wheel of karma to ultimately inform the resurrection body (*corpus resurrectionem, al-jism al-qiyyāmat*) and avoid earthly re-birth; and, at the collective level, prevent humanity from self-destructive annihilation. Indeed much becomes possible when, activated and cleared of all their residual influences, the mental, the emotional and the sexual human centres – respectively located in the physical head, in the heart and in the sex, also corresponding to the homologous seats of the major Abrahamic religions, Judaism, Christianity and Islām⁷ – are aligned and perform in unison as one. In the same spirit, all faiths should work paired to one will as they all aim at the same undifferentiated origin whose coarser manifestation is well appreciated by ordinary eyes. But the proved mesoteric sightseer, centred right in between Heaven & Earth where *esso*

and *exo* meet, investigates further the atemporal present. An inner vision coupled with the ordinary sight could be very effective in empowering the transition to a sustainable world, a world aligned with *dharmā*, sustaining and sustained beyond generalizations and assumptions, a world through and by which we ascend and descend upon the joyful and painful ladder of life. Jacob *docet*.

Each revelation discloses a specific aspect of the whole, for the entire whole in un-veil-able, unless knower, known and knowable are actually one. Knowledge can be of three kinds: it can be apprehended through the bodily experience of the world by means of learning, of science and so forth⁸; it can arise from within as intuition and direct appreciation of the event, as a deep understanding not mediated by the empirical data but shaped on the essence of the matter instead; or, at its best, it arises from the combination of the two, an inner-outer, spiritual-material mesoteric knowledge. No sacred knowledge is for sale, it is given for free, free of thought-constructs. Servants are we, servants of a knowable energy that encompasses all, that cannot be accounted for if not as an immeasurable quality⁹ at the threshold of the ensuing station, nothing but our own reflection, a reflection of a reflective sentient being.

A significant new feature of the mesoteric state – which, by the way, has always been there, hardly attainable by the majority of us, but very dear and familiar to its habitual dwellers – resides in the modality of its access. While in the past a great deal of arduous practice was needed to accomplish the opening in the self of the diaphragm between spirit and matter, nowadays, in virtue of the global shift of consciousness taking place at collective level, it becomes more easily and widely accessible. No guru, roshi, lama, master, teacher, trainer or coach is needed, as the trainer is embedded in our own deeper Self. Post-metaphysical evolutionary spirituality, submission to the *dharmā*, firm awareness of both the path and the world, metaperspective, with nothing but the intention to serve for good, closer to vision than to fantasy, sustainable and deliverable.

We are all migrants, exodus from the Cave to a new land to disclose issues of mutual interest, in eschatological terms, to launder the humankind karma. Discovery is not a quadrant, is an ethical tensor riding the tiger on a razor's edge, a conical wave-cycle spiralling from one station to the next. Time is really getting short, time is an illusion, a *phantasis*, an image gone wrong. The mesoteric 'time', the ultimate present denuded of past and future, that our soul needs to experience while imbedded in the space-time dimension in order to

perceive and 'know' matter, is a necessary gnoseological step for the soul to progress to the unified consciousness (*insān-i-kāmil*; *antropos teleios*) where the I is installed on the true human level, where the individual and the collective merge in the perfected humanity (*kamāl-i insāniyya*), and soul, spirit and body become one. Compassion, *cum cordis*.

Although the 'why and how' the *Fiat Lux*, the *Kun!*, aka the *Big Bang* came into being has been debated intensely among scholars and practitioners alike, no ultimate solutions have been found, yet. It remains harder to identify because it 'happens' in a dimension clear of space and time, thus undetectable by our instruments calibrated on it. But how and why the spiritual-material energy, transmutation after transformations, in a process of gradual condensation (*nimeṣa*, anado, yin, inspiration, regression, withdrawal, occultation, *bāṭin*, *anābasī*) loses mass and acquires gravity to solidify into matter until its 'spiritual' content is next to zero? And how & why then, at exactly that zero point, it reverts to gradually expand (*unmeṣa*, catodo, yang, expiration, progression, manifestation, *zāhir*, *katabasis*) to re-acquire mass and lose gravity? This process of constant flow of the two polarities up and down the ladder of creation, known as the Breath of the Compassionate (*al-naḥas al-rahmān*) or the Wheel of the Absolute (*anuttara-cakra*) in a different cultural tradition, can be easily detected in all segments of the creation from matter to spirit and from spirit to matter. We should bear in mind that in nonlocality, freed from the space-time constraint, expansion and contraction, exhalation and inhalation (*prāṇa*, *apāna*) are really happening at once and are perceived as the polar aspects of unity. This why & how of the Beginning – that some maintain due to a 'wish' to manifest and be manifested, to be known; that other ascribe to the Will; or else as incomprehensible, because alien to the spatial-temporal dimension – is usually rendered in languages with the sign A (अ; aleph; alef, א; alpha, α; ālif, ʾ), the first letter of the sacred alphabet in which the creation expresses itself – it is worth keeping in mind that 'sacred' means to make or become sacred through a sacrifice. This A is not a symbol, it does not stand for something other than itself – symbols symbolize, they refer to a reality of a vertical order, the symbolized¹⁰ – it is indeed the Principle, the Absolute, the beginning in the time-space dimension of the energetic flows from the anode to the cathode of the existence, from *alpha* to *omega*. From A follows B, in Sanskrit, the *bindu*, the dot without area at the threshold of differentiation, the subtle vibration of life, the principle of creation, the voiceless emission Ḥ (*visarga*) from which *spanda* emerges; in Arabic, it is the 'dot of creation' under the letter *b* (*ḅ*, ٓ), the

maximum condensation, the origin of the world, from which all powers emanate and into which they all collapse, the union in a state of heightened potency, not yet divided to engender diversity.

The instability of the spiritual-material experience, until its consolidation, partially resides in the alternating perception of time – in both its historical/linear and sacred/circular aspects – and of its absence, of succession and simultaneity¹¹. The roulette of life does not have stops, it goes right to its final goal in just one shot. The mesoteric citizen enlivens the imaginal geography, spring cleaning before resurrection between the *tabula smaragdina* (*lawh mahfūz*) and Mount Qaf (Meru), strolling to and fro the cities of Jābalqā and Jābarsā, the nadir and the zenith united through their centres by the *axis mundi* in a holy marriage of Heaven and Earth. A collection of pearls, offered to enjoy the missing necklace. Hermetic sounds, mesoteric utterances devoid of meaning. To be born, to grow up, to decay and die. A cycle anew, a new start, a new life. Don't give it for granted, as it is granted to anyone. The time of secrets is gone, lost and gone forever. The unveiling of the mesoteric reality brings into being the real human kind, in whom the living sign is manifested: a hierophany and a teophany at once on the plane of prophethood, spirituality is flourishing outside of religions and each one is a prophet. In wording the unveiling, we ought to keep firm the helm in the mesoteric dimension while 'temporarily' off-centre our being to its *exo* side, at times a painful, but necessary condition¹². Little did we know of the impingement of reality on these stances witnessing Void and Light as performing partners in shaping the universe. They are hard to keep at balance for of their perpetual shifting from quality to quantity in self-disclosing the visible-invisible cosmos. Indeed a great day the day of creation, no doubt. We started from scratch and joyfully and painfully are leaping into a new state of consciousness, yet we are compelled to use an obsolete language hardly suiting the new. Verily, we need to grant this world a chance of renewal, a possibility to be, and a purified, clear and refined thinking mind to comprehend in depth the language of the new world is far better than a dull one. Lapalace *docet*.

“;-) Do you mind?” “Not at all” said he, holding her hand while strolling arm in arm. “Good luck!”, a sudden whisper at their back. “What?” “I didn't say anything darling, just life.” Three days later death found them. “Shit! If it would have lasted just a bit more... we were almost there...” “Very often I do not recognize myself.” Period.

Language is an expression of a people, of peoples, of their right to speak up in freedom by combining and recombining with the rest of society, as letters and signs recombine in assorted manner to cast into the world novel meanings and shades. The symbolical plane is one of the means to enable the ordinary language to convey content otherwise inaccessible. Symbols are like diacritical marks wandering in the void, waiting for the right circumstance or for a favourable probability to plane upon letters and give them a different meaning, a different shade to their root – a storm of diacritical marks will certainly make a language hard to understand. Triconsonantal roots languages encapsulate in three letters the core meaning of a higher order. The same three consonants, rearranged in a different pattern, unveil the diverse stratifications, aspects and shades of that root-meaning. In reality, the ur-meaning of the root dwells in each of its constituent individual letters, each phonema bearing a portion of the total meaning, also related to its symbolical-numerical value. Gematriya (*'ilm al-hurūf*) attempts to decipher these meaning by attributing to each letter a single numbered value, indeed an occasional device as numbers are expression of 'quantities', even irrational numbers are still such. In this vein, 1 is the unity, 2 the split of the original dyadic unity into the two polarities of contraction and expansion, the two genders, and so forth. Ideographic languages combine and recombine signs (ideas) around one single character to give new meanings to a visual gestaltic root. Pictographic languages make use of univocal well defines picture as letters, other languages arrange letters and roots in differing fashions, but only some Western languages display capital letters to confer value to certain concepts and words – God, the Love that transfigures reality, etc. –, in the hope that miniscule letters will not become arrogant and step outside of the box – indeed their inferiority complex is unbearable, but being deeply aware of the old saying that “high heads will be the first to be cut off”, they keep flat. Martyrdom is unacceptable; there is no other reality than the one we ourselves individually live. All the rest is illusion – an image gone wrong.

In sacred languages letters and words convey at the same 'time' multiple layers of meaning¹³. They are considered sacred because they are issued by the timeless origin and able to expresses a state of consciousness not necessarily related to logical categories and, likewise poetical languages, to bear extra dimensional meanings. Even though these are based on the historical and literal sense and coexist and express themselves through it, they do not identify with. The beauty of a language nests in its capacity to

convene both meanings and deeds, facts & words breaking off their dichotomy to become one, one, with its own rhythm, a cadence between the inner and the outer in the *hortus conclusus* of our being. *Nomina sunt consequentia rerum.*

“i’m totally stupid, i don’t understand anything, i swear it, i don’t, i don’t...” “guess what, guess what!” “yessss, that’s what i like! y’r beautiful laugh!” “i’m totally stupid, i don’t understand anything, i swear it, i swear it!” “i like to hear u laughing! a waving sound coming from afar, ajar; then a pause, a diastema, an interval, and again a new cycle, and so on and so forth.”

Style is that particular aspect of the individual imprint that makes it recognizable from any other, a distinctive trait of our essence, the hue we confer to reality and to our own actions, namely, our own individual way to express something, our own enterprise in this world distinct from any another. To walk hand in hand is not necessarily trotting up and down the same way, but rather to acknowledge and respect others people path, which might greatly differ from ours. To acknowledge and respect diversity is to acknowledge the ‘other’ in us and share the intent of a direction. No colour of skin, inclinations of gender, diverging of political or religious views would prevent delivery. Resilience and patience walk arm in arm on the way, direction and intention at the helm: who would ever dare to stop it?

“Ah aha ah, indeed it seems a difficult task ... i said: ‘to offer’ is ‘to give’ without expected or unexpected reward, just *give* for the joy of giving”. “indeed u’r smile is the glory of the universe unfolding its splendour to the soul to depict the undepictable.” “com’on! i know who u’r and u know me, smile: the universe is infolding! i think u do understand me better than what u think u do, i’m u!!!” “Ok, i told you my worldly age, but how old are u?” Delete conversation.

A sacred art, as a sacred language, is not the one relating ‘sacred’ or hagiographic themes, but the one springing from a sacred inner place, the origin of creativity, and which conveys in the matter its original vibration. It is a creation of nature, as a leaf of a tree, channelling what can hardly be shaped into words and that, fast-holding its same meaning at all levels, fine tunes to its own aesthetic experience. It depicts the visible and the invisible, morphism or abstractions, processes, performances or situations with no limits – if not the hindrances of a split dissonant conduit unfit to express an undivided reality¹⁴. The artist, dealing with ethical issue more than with esthetical ones, makes things with art, with *techné*, with conscious knowledge and understanding,

performing an act of love, as the whole creation, and it is exactly this to make art so cherished by people, protected and conserved in the collective imaginary as the goal of perfection... a banjan in a desert, areal roots A paradox.

“We’re quite addicted to subtle discussions; / We’re very fond of solving problems. / So that we may tie knots and then undo them, / we constantly make rules for posing the difficulty / and for answering the questions it raises. / We’re like a bird which loosens a snare /and then ties it tighter again / in order to perfect its skill. / It deprives itself of open country; / it leaves behind the meadowland, / while its life is spent dealing with knots. / Even then the snare is not mastered, / but its wings are broken again and again. / Don’t struggle with knots, / so your wings won’t be broken. / Don’t risk ruining your feathers / to display your proud efforts¹⁵”.

Unless:

“They scintillate with the diversity of sensations and resonate in the field of their awareness like the feather of a peacock unfurled and folded again in the ecstasy of its dance¹⁶.”

While human activity was giving rise to art, culture and systems of thought, Big Business was creating needs and tailoring the market to feed them. While the Western civilization is collapsing under the pawns of a fierce mercenary financial-drive and the East is raising its rainbow over a sick planet, Gaea is capsizing under them both. *Natura natura* and *Natura naturata* are at risk. Resistance from the old falling apart, from the obsolete state of consciousness preventing transformation are felt at all levels, from the individual to the collective plane and manifest themselves as cracks in a bygone way of thinking, of feeling, of understanding, all hindrance to a further development. Wars and destructions are the whisking strokes of an agonizing democracy dissected by an unpurposeful society who has lost direction and wanders apart as a desperate visionless marginalized *persona non grata*. Greed, selfish interest, lack of morality, the inability to welcome the other are just some of the cancers corrupting our society, the result of a toxic self-centred withdrawing consciousness unsuited to nurture the demand for an omni-directional development. With the ‘crises’ contracting the moment and grinding into pieces the last phase of this civilization, with an unpaired wealth distribution and food supplies in danger, an uncomfortable disrupting atmosphere is hovering our souls.

Complementary, from the union of spirit and matter, and as a natural outcome of the access to the collective level, a new creative content is forging unprecedented development models consonant with a society of individuals, of real people. No more arrogance, but

humility in an economy focusing on the common good, not as a comfortable guise but as a real pro-
 tension to our own twin brother. Recognizing, con-
 sidering and fulfilling the needs of the other is ulti-
 mately to recognize, consider and fulfil our own
 needs. There is no social development without indi-
 vidual development, adapt or perish. To empower a
 transmutation of consciousness entails being a con-
 scious agent of change devoid of self-interest. Indeed
 actions performed not for the individual profit, but for
 the benefit of the global community are the only way
 ahead. No re-enacting of old feelings and paths, cre-
 ative collaboration and not competition, a practice of
 self-transcending service, an aperspective experience for
 a nonprofit society in which the rewarding awareness of
 being helpful in co-creating a new type of economy is
 itself the real priceless profit. First person spirituality,
 authenticity, equal opportunity, social justice, human
 and civil rights, collective intelligence, empowerment
 of nature in human affairs, ecological responsibility,
 gender concern, poverty alleviation in an inclusive
 and participatory post-ideological democracy, multi-
 stakeholder and bottom-up approach, open source,
 copyright-free, nonprofit, unucrative and solidarity
 economics and finance grounded on fair, responsible
 and sustainable sharing of resources, are but the few
 indicators and the decoded passwords driving the
 change and paving the access to the new inclusive
 state. Don't ask around, ask your own self.

Indeed now, more than ever, while a focused con-
 scious attention attends a shifting humanity con-
 verging Known, Knower and Knowable into
 oneness, higher spiritual food to re-balance and
 advance further is needed. This time is crucial;
 time is an illusion, an *image gone wrong*. With
 the sensitivity resonating at a higher frequency,
 we are collectively leaping into a new phase to
 enliven the human nature and make it perma-
 nently abide in the mesoteric dimension. The
 new state of consciousness, coessential with
 the collective responsibility, is engaged in per-
 forming the best strategy to achieve new effi-
 cient shared solutions to sustain an initiatory
 path of a novel planetary culture. In a global,
 enlightened and vivified humankind, natural,
 human and social capital are as important, if
 not more, as financial capital. With a parallel
 shift in global politics, governance and diplomacy,
 the UN should align its modus operandi to more
 just and humane action. The current Western
 male-centred society, having reached it maximum
 expansion, is inverting polarity and, transmuting
 into a more gender equitable society through the
 empowerment of women, will bear a predominantly

feminine signature. The surge of the feminine is
 already taking place and will certainly lead for a
 while before decaying to re-balance again. The
 tensorial membrane is hymeneal. We are leaping,
 we are shifting, we are changing.

A sneeze in my ear, "God bless you!" ;-)
 bosons & mesons are displaying their cosmic nuclear dance.
 Who will ever prevent Light to Be? "Respect our
 body, our temple!" "why u didn't tell me earlier?"
 "Too much information at the same time can per-
 turb the communication... too much noise..."
 "listen carefully now..."

To facilitate, from the individual to the collec-
 tive plane and *viceversa*, the attainment of a
 higher state of consciousness, we individually
 and collectively need to be aware of the global
 leap into the mesoteric consciousness in which
 humankind as a whole is engaged; we need to
 follow and submit our own windmills to the
 wind (*nūh, rōh*) of transmutation and start building
 our resurrection body here, in this basic twinned
 dimension, with patience and sincerity we ought
 to be our own father and mother. The intention
 is fundamental: a clear *intent* aligned with the
 direction of action has great probabilities to deliver,
 if not, our actions will turn into entropy, the result
 of a whatever energetic exchange not aligned with
dharma.

None of us individually holds the whole truth, we
 can only savour a few particles of light in a dark
 room, but collectively we can grasp the beauty of
 creation. Truth is self-evident, we recognize it as soon
 as it strikes within us a corresponding chord to which we
 unconditionally adhere with a sense of having known it
 ever since before time, a sort of mild fulguration in
 which we cohere with our inner spouse, a sacred union
 within the Self, a mesoteric hierogamy.



*These are some of the verbose considerations that came to
 my spirit and that I wished to share with you. It took me a
 quite a while – a while into a while to be honest – to
 record them down here. On account of we, of I and you
 becoming one, we wish you the ongoing discovery and
 savouring of an ever fresh knowledge.*

*The ensuing visions displayed by companion wayfarers nar-
 rate the state of the art in consciousness studies. They all are
 complementary to each other, reflecting the diversity of the
 approaches bound for the same goal: the mesoteric plane.
 Enjoy the leap.* ◉

¹ *Consciousness & Development* (2008). *SpandaNews*, II, 4.

² *Spanda* is a Sanskrit term – derived from the root *spadi*: “to move a little” (*kimcit calana*) – for the subtle creative pulse of the universe as it manifests into the dynamism of living form. The term is a key concept of the Kashmir Śaivism monistic philosophy (IX century) according to which the entire universe is nothing but conscious energy, and that everything in the universe is that consciousness expressed in different forms. *Spanda* can be translated as throb or pulse or to mean vibration, movement, or motion, referring to waves of activity issuing forth from an unseen source of spontaneous expression, emanating not only from the centre outward, but from everywhere at once. It might be described as the essence of a wave in the ocean of consciousness. An impulse or desire to create and enjoy, likened to an eternal spring, joyfully overflowing its inner essence into manifestation and inspiration, yet ever full, complete and unchanging.

³ Muhammad Subuh Sumohadiwidjojo (1901-1987).

⁴ A qualified representation of the peculiarity of the *tensorium* is often embodied in art. For instance, in the Wayang kulit art shadow theatre, a wooden framed white fabric screen (*kelir*), on which are casted the shadows of the leather puppets, stands between the performers and the audience, the two polarities within and of the performance. In older times, the gender chasm was maintained by the male audience attending the event from the same side of the performers, while women partnering on the other side of the *kelir*. The puppets, made of coloured and glided carefully chiselled thin leather and supported by shaped horn handles (*cempurit*) and control rods (*teteg*), are enacted between the light source, a hanging brass oil lamp (*blencong*), and the screen by the puppeteer master (*dalang*) sitting cross-legged in front of the *kelir*, with at his back the gamelan orchestra. The *blencong* is shaped like a Garuda, the mighty mythological bird who, during the creation, possessed the knowledge of the gods and brought it to Earth, serving as a mediating messenger between the two – a homologous of the Simorgh, or of Hermes, or Semar. In its capacity to unite Haven and Earth through and with knowledge, Garuda oversees the heavenly Mount Meru (analogous to Mount Qaf), the psychocosmic mount focal point of the spiritual ascent from which top spring forth the elixir of life (see Gilgamesh-Utnapishtim). The performance, flourished with actions and narrations (*lakon*) of gods, demons and humans drawn either from the Mahabharata, the Ramayana or from indigenous sources, is mingled with the befitting gamelan music in the five-tone salendro mode – the number 5 holds a specific symbolical meaning in Javanese cosmology. The performance starts just after sunset to continue without a break until dawn, a complete nocturnal cycle to coincide, at anthropological level, with the death and rebirth transitional rite. It begins and ends with the appearing on stage of the *gunungan* (mountain) or *kayon* (forest), a large leather figure in the shape of a leaf on which traditional iconography details the Tree of life (Haoma, Yggdrasil etc.) and that, in the Javanese variant presents, at its middle lower section, a gate flanked by the two guardians (demons) of the threshold – the two polarities – who deny or allow the access to Mount Meru. Palpably, to the *kelir* between the performers and the audience – displaying on its surface the shadowy (*umbra*) reality to the audience – corresponds, in its porous capacity, the osmotic mesoteric dimension between the two states of consciousness welcoming the *eidos* on its surface. Undoubtedly, the *blencong* represents the source of the light of knowledge ever shining on the World. In its *visarga*, (*limesa*, expansion), the light is prevented (absorbed?) to reach the surface by a puppet manipulated by the *dalang*, and its shadow

– the opposite of the conscious I, the absence of matter – is casted on the screen of the phenomenal world. In former times, an oil “not from the East nor from the West” was used, nowadays electricity is the source – a synchronic parallel layer of reality on the historical plane at the collective socio-political level. Thus, while the audience is captured into a world of *phantasmata*, the actors beyond the screen manipulate the puppets. A metaphor. Only when the *dalang* and the audience meet and are one in a state of collective quasi-tranche active and conscious contemplation, the aesthetic *rasa* kicks in. In fact, it is the quality of the state of the *dalang*, the mediator – the ‘manipulator’ in its negative connotation when acting from a not clean source – to initiate the *sāqi* by offering another round. By cultural dissemination, the canvas of the painter, the stone of the sculptor, the body of the dancer and of the actor, the voice of the singer, in the last instances the body itself, become the *tensorium*. In Western medieval, as well as in Persian and Indian miniature painting, objects do not cast shadows, they are a product of and depict the imaginal reality and, as such, are deprived of any material consistency. A shadow does not have mass, is the region from which light is bound because of an obstacle interposed between its source and the receiving surface, a *penumbra* in a black-hole. It is light to make things visible, like the granules of dust in a room in penumbra, made visible, enlightened, by a ray of light outcoming from a tiny opening in a wall, so does the light of consciousness: it enlighten our reality in touching upon the *tensorium*.

⁵ In neurology, a reflex is an involuntary response to a stimulus when the nerve impulse from a receptor is transmitted inward to a nerve centre that in turn transmits it outward to an effector.

⁶ For instance, an action moulded on the vegetal realm – where greed and fear are companions and really enjoy making this world a mass – will imprint all subsequent action with its seal.

⁷ Islām, by taking avail of a reversed physiological-symbolical correspondence of the mental, emotional and the sexual centres with Judaism, Christianity and Islām, maintains that by being itself the latest chronological revelation in the Abrahamic prophecy cycle (*nihayāt-e adyān*), and by seating at the bottom end (sexual) of the human energetic centres cycle, the prophecy cycle itself has come to an end.

⁸ Science investigates the gross aspect of reality, of matter down to the infinitesimal neutrinos, boson and the like. A relic of an obsolescent state of consciousness, it verifies data against replicable events in the space-time dimension, but is unfitting to investigate the spiritual energy much finer than matter, for which a different set of tools specifically calibrated on it are needed.

⁹ Qualities are energetic patterns gravitating at collective level, akin to ‘angels’ – our own individual angel is actually our own intrinsic quality.

¹⁰ In this, symbols differs from metaphors as the former act on the vertical plane of the language, they refer to a higher (spatial) order, while the latter shift horizontally their meaning. Symbol and metaphor come together only at the intersection of the orthogonal axes, at the point of convergence where the vertical and the horizontal plane of our existence meet. This centre, depending on cultural variables, has often been identified with the soul at the conjunction of spirit and matter, or in the physical heart, or in the liver.

¹¹ The frequency of the alternation of the two phases is the period of their verification; the pace between one phase and the next is the rhythm of their manifestation. Changing the phase means, also, inverting the polarity of the frequency, to speed up its pace, to increase its vibratory frequency to a higher and subtler rate to ultimately reach the limits of its own possible expansions to then transmute into its opposite: enantiodromia (ἐναντίος + δρόμος, *enantios* + *dromos*, walk backwards). Taleta *docet*.

¹² Pain is a side product of growth, to avoid pain is to prevent prevent growth, but self-inflicting pain to foster growth is a bygone practice alien to the current development process. Yet, to cause pain, wars and destructions are the symptoms of a soul deprived of collective sentience, bereft of its meta-individual awareness.

¹³ In Sanskrit, the insertion in the mesoteric position of the *anusvāra*, the phoneme \bar{M} (subtle vibration, voiceless nasalization) between the syllables HA (*nimeṣa, prāna*, inspiration, inhalation) and SA (*ummeṣa, apāna*, expiration, exhalation) gives rise to the word HAMSA (HA, inhalation +> \bar{M} , subtle vibration +> SA exhalation) which means 'swan', or the spiritual principle of the individual which reunites in itself the two polarities of expansion and contraction through and by a subtle variation – the *dash* in the spiritual-material experience. Instead, the letter A (the origin, the retention, the suspended point in between inhalation and exhalation, *kumbhaka*) at the beginning + the HA (*nimeṣa, prāna*, inspiration, inhalation) + \bar{M} (subtle vibration, immission, *ummeṣa, bindu*) at the final position, generates AHAM (A, origin +> HA, contraction +> \bar{M} , subtle vibration) which means the 'Supreme I', the transcendent Self. AHAM, in its mirror image reversed order, becomes MHAA, the seed of contraction (\bar{M} , subtle vibration at the beginning +> HA, contraction +> A, origin) which connotes, evidently, the process by which the subtle vibration contracts to reabsorb the whole manifestation into its origin, parallel to the process of spiritual development, back to the origin. The same contraction-expansion sequence occurs with the practice, mostly performed silently in the inner chamber of consciousness, of the *dhikr* (mantra): *lā ilāha illā'l-Lāh* (there is no God but God, *non Deus nisi Deus*), where the first half of the invocation, *lā ilāha*, is remembered in exhaling – the expansion of the creation; from which, after a short breath retention (*kumbhaka*), follows the second half, *illā'l-Lāh*, in inhaling – the withdrawal of the creation back to its origin. Here too, the focal point lays in the hiatus between the two phases, hypostatically corresponding to the mesoteric dimension.

¹⁴ In a message, the information perceived from the point of view of the medium, is the message itself, for the medium itself becomes the message. If observed instead from the point of view of the message, the information conveys a meaning differing from the medium.

¹⁵ Rūmī. J. (1994). *Mathnawi*, II: 3733-3738. Version by Camille and Kabir Helminski (New York: Threshold Books).

¹⁶ *Vijñānabbairava*, 32. (1979). English trans. by Jaideva Singh (Delhi: Motilal Banarsidass).



2012 AND HUMAN DESTINY:

END OF THE WORLD OR CONSCIOUSNESS REVOLUTION?

STANISLAV GROF



Stanislav Grof heads the Grof Transpersonal Training Program and teaches at the California Institute of Integral Studies, US. He was formerly Chief of Psychiatric Research at the Maryland Psychiatric Research Center, Assistant Professor of Psychiatry at John Hopkins University in Baltimore, MD, and Scholar-in-Residence at the Eselan Institute in Big Sur, California, US.

He is editor of Ancient Wisdom and Modern Science and Human Survival and Consciousness Evolution, and author of many papers and books, among which Realms of the Human Unconscious, LSD Psychotherapy, Beyond the Brain, The Adventure of Self-Discovery, and The Cosmic Game.

SINCE THE PUBLICATION OF JOSE ARGUELLES' BOOK *The Mayan Factor: Path Beyond Technology* (Arguelles 1987) brought to the attention of lay audiences the fact that the most important of the Mayan calendars, the Long Count Calendar, would end abruptly on December 21, 2012 AD, there have been many discussions concerning the possibility that this prophesied the end of time or even of the world. Jose Arguelles organized in this connection what became known as *Harmonic Convergence*, the world's first globally synchronized meditation. It was held on August 16-17, 1987, a date which marked the beginning of the projected twenty-five-year culmination of two important cycles of Mayan cosmogony – the 5,125 year Great Cycle of History, as well as the 25,920-year Cycle of Evolution, both of them ending on the same day, December 21, 2012.

As this date is approaching, the mystery of the Mayan prophecy has become the focus of many articles, books, and conferences and of a movie entitled 2012. Similar prophecies about the end of the Great Cycle can be found in many other cultural and religious groups – the Hopi, Navajo, Cherokee, Apache, Iroquois confederacy, ancient Egyptians, the Kabbalists, Essenes, Q'ero elders of Peru, the Subsaharan Dogon tribe, and the Australian Aborigines. However, the Mayan prophecy is unique and most interesting, since it involves a specific date.

With some rare exceptions, such as the Mayan scholar John Major Jenkins (Jenkins 1998 and 2002) and a few others, the Mayan prophecy about the end of the cosmic cycle, the Fifth World, has been interpreted in terms of actual destruction of the material world and extermination of humanity, in a way similar to the interpretation (or better misinterpretation) of the term Apocalypse by Christian fundamentalists, particularly the millions of American Christians who believe that at the time of this global destruction they will experience "rapture" and be united with Jesus. People who see it this way are not aware of the fact that the original and literal meaning of the term *apocalypse* (Greek Ἀποκάλυψις *Apokálypsis*) is not destruction but "lifting of the veil" or "revelation." It referred to the disclosure of some secrets hidden from the majority of humanity to certain privileged persons. The source of the misinterpretation of this word is probably the phrase "*apokálypsis eschaton*" which literally means "revelation at the end of the æon, or age."

I would like to suggest in this paper a radically different, more optimistic interpretation of the Mayan prophecy – as referring to the end of the world as we have known it: a world dominated by unbridled violence and insatiable greed, egotistic hierarchy of values, corrupted institutions and corporations, and irreconcilable conflicts between organized religions. Instead of predicting a physical destruction of the material world, the Mayan prophecy might refer to death and rebirth and a mass inner transformation of humanity. In order to explore this idea, we have to answer two important questions, First: *How could ancient Mayans two thousand years ago know anything about the situation that humanity would be facing in the twenty-first century?* And second: *Are there any indications that modern society, more specifically the industrial civilization, is currently on the verge of a major psychospiritual transformation?* I will try to address these questions in the following text.

The Mayan prophecy concerning the 2012 winter solstice has an important astronomical dimension. Over 2,000 years ago the early Maya formulated a profound galactic cosmology. Being excellent observers of the sky, they noticed that the position of the winter solstice sun was slowly shifting toward an alignment with the galactic axis. This movement is caused by

so called *precession* – the wobble of the rotational axis of the earth. The Mayans concluded that major changes of cosmic proportions would occur at the time of this auspicious solar/galactic alignment. This is an event that happens only every 25,920 years, which is the period required for the winter solstice sun to move through all twelve zodiacal signs. The sunrise on December 21, 2012, would thus represent not only return of the light into the world, as it happens every year on winter solstice, but also enlightenment on a large scale and of a different order.

C. G. Jung used in his book *Aion* and in his other writings the term “Platonic Month” for the period that it takes the vernal equinox point to pass through one constellation of the sidereal zodiac and the term “Platonic Year” for the completion of the entire zodiacal cycle on a much larger cosmic scale. Jungian scholar Alice Howell expounded this perspective in her book *Synchronicity in Astrological Signs and Ages* (Howell 1990). She pointed out that the crossing of the vernal equinox sun into another constellation has been regularly associated with a radical shift of the dominant archetypes. This would then influence, for example, the religious and ritual symbolism of that period, as exemplified by the importance of the bull in Age of Taurus, of the sheep in the Age of Aries, and of the fish in the Piscean Age.

While the time of the annual solar return can be astronomically exactly calculated, what happens astrologically in connection with the galactic alignment would not be a one-day event. Precession shifts the position of the equinoxes and solstices one degree every 71.5 years. Because the sun is one half of a degree wide, it will take the December solstice sun almost 36 years to precess through the galactic equator. Astrologically, the transits also are not momentary events; their influence follows a bell-curve. Their influence gradually increases and reaches a maximum at the time when the angular relationship is exact; following this culmination, it gradually decreases. The influence of the galactic alignment would thus extend over a period of several decades and the world changes associated with it would already be underway. The present form of galactic alignment occurs only once every 25,920 years. It is interesting that the last alignment of this kind coincided with the time of disappearance of the Neanderthals and emergence of the Cro-Magnon culture with radically new ritual and artistic expression.

Astronomers of the pre-classic Maya culture called the Izapa Culture devised the Long Count calendar consisting of thirteen *baktuns* (each lasting 394 solar years) to target the time when the cosmic alignment would maximize – December 2012 AD.

To accomplish that, they had to place the beginning of this calendar to August 11, 3114 BC, many centuries before their time. It is this 5125-year/13 baktun cycle representing a wave harmonic of history that ends on December 21, 2012. The cultural legacy of ancient Mayans includes also glyphs and images carved in stone monuments and paintings on funeral vases, plates, and tripods related to this auspicious alignment that convey information open to interpretation (Robiczek 1981, Grof 1996, 2006).

I am not a mayologist, astronomer, astrologer, or psychic. I should therefore say a few words about how I became interested in this area and why I should be able to say anything of relevance concerning the enigma of the Mayan prophecy. In my adolescence and post-adolescence, I was fascinated by Mesoamerican cultures and read many books about the Mayans, Aztecs, Incas, and other cultures of Central America and South America. I also learned how to paint in the styles of some of these cultures. My interest deepened even further when I started working with psychedelics and discovered the importance of the process of psychospiritual death and rebirth. The stories about the Mayan Hero Twins and Quetzalcoatl are prime examples of this process. I later studied these Pre-Hispanic mythologies in some depth as preparation for my books entitled *Books of the Dead* and *The Ultimate Journey* (Grof 1994 and 2006). I came to the conclusion that it is impossible to really understand the Mayan culture unless we take into consideration the enormous importance that psychedelics and other “technologies of the sacred” played in the ritual, spiritual, cultural, and even scientific life of the ancient Mayans. And I believe that it is impossible to seriously study the Mayan prophecy without taking this fact into consideration.

My own main area of interest in the last fifty years has been research of non-ordinary states of consciousness or, more specifically, an important subcategory of these states for which I coined the term holotropic. This composite word means literally “oriented toward wholeness” or “moving in the direction of wholeness” (from the Greek *holos* = whole and *trepo/trepein* = moving toward or in the direction of something). These are states that novice shamans experience during their initiatory crises and later induce in their clients. Ancient and native cultures have used these states in rites of passage and in their healing ceremonies. They were described by mystics of all ages and initiates in the ancient mysteries of death and rebirth. Procedures inducing these states were also developed in the context of the great religions of the world – Hinduism, Buddhism, Taoism, Islam, Judaism, and Christianity (Grof 2000, 2006).

The Mayans had a rich array of “technologies of the sacred,” procedures that can induce holotropic states of consciousness. We have ample pictorial evidence on Mayan stone stelae, sculptures, and ceramics that they used for this purpose the Mexican cactus peyote (*Lophophora williamsii*), magic mushrooms (*Psilocybe mexicana* or *coerulescens* known to the Indians as *Xibalba okox* or *teonanacatl*), and skin secretions of the toad *Bufo marinus*. Additional plant materials used in pre-Hispanic Mesoamerica were *Salvia divinorum*, also known as diviner’s sage, morning glory seeds (*Ipomoea violacea*) called by the natives *ololiuqui*, *balche* (a fermented drink made from the tree *Lonchocarpus longistylus* and honey), *Datura* plants, wild tobacco (*Nicotiana rustica*), and water lily *Nymphaea ampla*. Many of these plants appear as stylized decorations on the beautiful statue of the Nahuatl god Xochipilli, Lord of Flowers.

A powerful and specifically Mayan mind-altering technique was massive bloodletting induced by using lancets made of stingray spines, flint, or obsidian to wound the tongue, earlobes, and genitals (Schele and Miller 1986, Grof 1994). Ritual bloodletting opened up an experiential realm that was not ordinarily accessible before the time of biological death. The Mayans used the symbol of the Vision Serpent for the experiences induced by blood loss and shock. This symbol represented the contact between the everyday world of human beings and the world of gods and sacred ancestors, who were expected to appear in their visions in the supernatural realms. The lancet was perceived as a sacred object with enormous power; it was personified in the form of the Perforator God.

Because of the extraordinary importance that these “technologies of the sacred” had in the Mayan culture, it is reasonable to assume that visionary experiences induced by them might have provided inspiration for the prophecy concerning 2012 and played a major role in its articulation. It is thus fully justified to look at this prophecy through the prism of the discoveries of modern consciousness research involving psychedelic substances and other consciousness-expanding procedures.

In holotropic states of consciousness, it is possible to obtain profound revelations concerning the master blueprint of the universe designed by cosmic intelligence of such astonishing proportions that it is far beyond the limits of our everyday understanding and imagination. Individuals experiencing psychedelic states, including myself, occasionally reported that they had profound illuminating insights into the creative dynamics of the Kosmos. More specifically, psychedelic pioneer Terrence McKenna described in his preface to John Major Jenkins’ book “Maya Cosmogogenesis 2012”

(Jenkins 1998) that he received his insights concerning 2012 in his mushroom sessions. These experiences provided the inspiration for his own book on 2012 co-written by his brother Dennis and entitled *The Invisible Landscape* (McKenna, McKenna, and Taylor 1976).

Individuals who had such revelatory cosmic visions suddenly understood that what is happening in the material world is formed and informed by archetypal principles, beings, and events existing in dimensions of reality that are inaccessible for our everyday consciousness. They also saw that the dynamics of the archetypal world is systematically correlated with the movements of the planets, their angular relationships, and their relative positions to the fixed stars. This led to a completely new understanding of astrology, its origins, and paramount importance. It became clear to them that the sources of astrology were large-scale encompassing visions of the workings of the Kosmos and not tedious accumulation of individual observations of correlations between events in the world and celestial bodies.

Richard Tarnas, amassed over a period of more than thirty years impressive and convincing evidence for systematic correlations existing between the archetypal world, celestial dynamics, and psychological and historical processes and presented it in his ground-breaking and paradigm-breaking book *Cosmos and Psyche* (Tarnas 2006). Tarnas’ astrological research has focused primarily on correlations with the movements of the planets, but there exist astrological systems, which pay great attention to fixed stars; experiences in holotropic states can provide equally revealing insights in this regard.

An important aspect of experiences in holotropic states is that they transcend narrow linear time and make it possible to see events in the universe on a cosmic astronomical scale. In all their grandeur, time scales like the Mayan Long Count Calendar or the Great or Platonic Year are very modest as compared to others inspired by visionary experiences, such as those found in Tantric science, in which the age of the universe amounts to billions of years (a number similar to the assessment of modern cosmologists), or to those discussed in Hindu religion and mythology – the *kalpas* or the *Day of Brahman* – that also amount to billions of years. The visions of ancient Mayan seers could thus with the help of “technologies of the sacred” easily reach many centuries into the future.

The Mayan prophecy concerning the galactic alignment is not limited to astronomical observations and astrological predictions; it is intimately interconnected with mythology, with what C. G. Jung called the

archetypal domain of the collective unconscious. For example, the Mayan seers referred to the December solstice sun as “Cosmic Father” and to the Milky Way as “Cosmic Mother”. They envisioned the center of the galaxy, where modern astronomy places a giant black hole, as her creative and destructive womb. The time of the galactic alignment was thus the time of a cosmic *hieros gamos*, sacred marriage between the Feminine and the Masculine.

In the year 2012, the sun will have travelled to the edge of a cosmic dust cloud known as the Great Dark Rift that lies along the Milky Way and seems to divide its light into two paths. The Mayans called this dark rift Xibalba Be (Road to the Underworld) and saw it as a place of birth and death and of death/rebirth. It was for them the birth canal of the Cosmic Mother Creatrix, where the December solstice sun will get reborn in 2012. It was also a place of death, because it is the doorway into the underworld, the land of the dead and the unborn. These associations clearly were not products of everyday fantasy and imagination of the Mayans projected on the night sky, but results of profound direct apprehensions of the connection between the archetypal world and the celestial bodies and processes.

The Mayan prophecy has also an important mythological connection to the story about the Hero Twins, Hunahpu and Xbalanque, who were invited by the death gods to visit the underworld Xibalba and play ballgame with them. The Xibalba Lords put them through many ordeals and the brothers overcame them all and, finally, they died and were reborn as the Sun and the Moon (or according to some interpretations as the Sun and Venus). The part of the story that seems particularly relevant in this regard is the battle of the twins with the bird demon Vucub-Caquix (“Seven-Macaw”). He is a vain, selfish, and impulsive ruler, who pretends to be the sun and the moon of the twilight world in-between the former creation and the present one. He seems to represent the ego archetype that is dominant at the end of the cycle. Seven Macaw seems to have an archetypal parallel in the New Testament – the Endtime Ruler or the “Beast,” also known as Antichrist.

Hunahpu and Xbalanque defeat Seven Macaw and strip him of his teeth (the instrument of violence), of his riches, and his power. By doing this, they facilitate the resurrection of their father, One Hunahpu, a just ruler who represents selfless divine consciousness that is holistic; it shows concern for all beings, and makes political decisions based upon future generations or – as Native Americans say – with regard to how they will affect seven generations down the road.

Mayologist and cardiologist Francis Robiczek believed that many of the paintings found on Mayan funeral vases were actually illustrations to a lost Mayan Book of the Dead (Robiczek 1981, Grof 1994). He showed that the images depicting Xbalanque (Infant Jaguar) in relation to a strange monster Cauac can be arranged in a characteristic sequence. He believed that this trajectory might reflect a movement of a celestial body. Cauac is a peculiar creature who can change size and shape; in view of the Mayan’s interest in death and rebirth, it makes more sense to see it as related to biological birth. Many of the funeral vases, plates, tripods, and sculptures also portray specifically scenes of death and rebirth (45-47). Kukulcan, or Plumed Serpent, Mayan deity (equivalent of the Aztec Quetzalcoatl), was a powerful symbol of death and rebirth. These facts seem to support the interpretation of the Mayan prophecy as referring to a process of transformation rather than destruction.

Research of holotropic states – psychedelic therapy, holotropic breathwork, and work with individuals in “spiritual emergencies” – made major contributions to the understanding of mythology. Myths are commonly considered to be products of human fantasy and imagination not unlike the stories of modern fiction writers and playwrights. Consciousness research has brought convincing support for the work of C. G. Jung and Joseph Campbell suggesting a radically new approach to mythology. According to these two seminal thinkers, myths are not fictitious stories about adventures of imaginary characters in nonexistent countries and thus arbitrary products of individual human fantasy. Rather, myths originate in the collective unconscious of humanity and are manifestations of primordial organizing principles of the psyche and of the cosmos which Jung called *archetypes* (Jung 1976).

Archetypes express themselves through the individual psyche and its deeper processes, but they do not originate in the human brain and are not its products. They are superordinated to the individual psyche and function as its governing principles. In holotropic states the archetypal world can be directly experienced in a way that is as convincing and authentic as the material world appears to be, or more so. To distinguish transpersonal experiences involving archetypal figures and domains from imaginary products of individual fantasy, Jungians refer to this domain as *imaginal*.

French scholar, philosopher, and mystic, Henri Corbin, who first used the term *mundus imaginalis*, was inspired in this regard by his study of Islamic mystical literature (Corbin 2000). Islamic theosophers call the imaginal world, where everything existing in the sensory world

has its analogue, *alam a mithal*, or the “eighth climate,” to distinguish it from the “seven climates,” regions of traditional Islamic geography. The imaginal world possesses extension and dimensions, forms and colors, but these are not perceptible to our senses as they would be if they were properties of physical objects. However, this realm is in every respect as fully ontologically real and susceptible to consensual validation by other people as the material world perceived by our sensory organs.

Archetypes are timeless essences, cosmic ordering principles, which can also manifest as mythic personifications, or specific deities of various cultures. The figures of Maya mythology – Hunahpu, Xbalanque, their father One Hunahpu, Seven Macaw, Quetzalcoatl (Kukulcan), and others - like those of any other culture are thus ontologically real and can be directly apprehended by individuals experiencing holotropic states. As John Major Jenkins pointed out, Giorgio de Santillana and Hertha von Dechend contributed to the understanding of archetypes another important dimension that is relevant for the problem of the Mayan prophecy. They described in their book *Hamlet's Mill* the deep connection that exists between myth and astronomical processes (de Santillana and Dechend 1969).

In 1948, after many years of systematically studying mythologies of various cultures of the world, Joseph Campbell published his ground-breaking book *The Hero with a Thousand Faces*, which in the following decades profoundly influenced research and understanding in the field (Campbell 1968). Analyzing a broad spectrum of myths from various parts of the world, Campbell realized that they all contained variations of one universal archetypal formula, which he called the *monomyth*. This was the story of the hero, either male or female, who leaves his or her home ground or is forcefully separated from it by external circumstances and, after fantastic adventures and ordeals culminating in psychospiritual death and rebirth, returns to his original society radically transformed – as an enlightened or deified being, a healer, seer, or great spiritual teacher.

In Campbell's own words, the basic formula for the hero's journey can be summarized as follows: “*A hero ventures forth from the world of common day into a region of supernatural wonder; fabulous forces are encountered and a decisive victory is won; the hero comes back from this mysterious adventure with the power to bestow boons on his fellow men.*”

Campbell's inquisitive and incisive intellect went beyond simply recognizing the universality of this myth over time and space. His curiosity drove him to ask what makes this myth universal. Why

does the theme of the hero's journey appeal to cultures of all times and countries, even if they differ in every other respect?

Campbell's answer has the simplicity and unrelenting logic of all brilliant insights: the monomyth of the hero's journey is a blueprint for the transformative crisis, which all human beings can experience when the deep contents of the unconscious psyche emerge into consciousness. The hero's journey describes nothing less than the experiential territory that an individual must traverse during times of profound transformation. During the years of our friendship, Joseph Campbell also enthusiastically embraced the concept of Basic Perinatal Matrices (BPMs), because they provided for him another important piece of the puzzle, linking the process of spiritual death and rebirth to biological birth. And birth is an experience that all humans share, irrespective of their culture, geographical location, and historical period. The story of the Mayan Hero Twins is a classical example of Campbell's Hero's Journey. It belongs to a vast array of archetypal motifs that we can experience in holotropic states.

I hope that the above discussion adequately addressed the first question that I asked earlier in my paper: “*How could ancient Mayans two thousand years ago discover anything that would be relevant for humanity in the twenty-first century?*” The theme of Joseph Campbell's Hero's Journey brings us to the second question: “*If the Mayan prophecy does not refer to the destruction of the world and to extermination of humanity, but to profound collective psychospiritual death and rebirth comparable to what Campbell described on the individual scale, are there any indications that such inner transformation is possible or that it actually is already underway.*”

My approach to this question is based not only on observations of the experiences of thousands of individuals in holotropic states of consciousness – psychedelic therapy, Holotropic Breathwork sessions, and spontaneous psychospiritual crises (“*spiritual emergencies*”) – but also on extensive personal experience of these states. I would like to begin this discussion with an account of an experiential sequence from one of my own psychedelic sessions. It provided for me deep insights into the archetype of the Apocalypse, a motif that occurs relatively rarely in holotropic states, but is particularly relevant for the topic of our discussion.

About fifty minutes into the session, I started experiencing strong activation in the lower part of my body. My pelvis was vibrating as enormous amounts of energy were being released in ecstatic jolts. At one point, this streaming energy swept me along in an

intoxicating frenzy into a whirling cosmic vortex of creation and destruction.

In the centre of this monstrous hurricane of primordial forces were four giant herculean figures performing what seemed to be the ultimate cosmic sabre dance. They had strong Mongolian features with protruding cheekbones, oblique eyes, and clean-shaven heads decorated by large braided ponytails. Whirling around in a frantic dance craze, they were swinging large weapons that looked like scythes or L-shaped scimitars; all four of these combined formed a rapidly rotating swastika.

I intuitively understood that this monumental archetypal scene was related to the beginning of the process of creation and simultaneously to the final stage of the spiritual journey. In the cosmogenetic process (in the movement from the primordial unity to the worlds of plurality) the movements of the blades of the scimitars represented the force that is splitting and fragmenting the unified field of cosmic consciousness and creative energy into countless individual units (*monads, jivas*). In relation to spiritual journey, they represented the stage when the seeker's consciousness transcends separation and polarity and reaches the state of original undifferentiated unity. The direction of this process seemed to be related to the clockwise and counterclockwise rotation of the blades. Projected into the material world, this archetypal motif seemed to be related to growth and development (the fertilized egg or seed becoming an organism) or destruction of forms (wars, natural catastrophes, decay).

Then the experience opened up into an unimaginable panorama of scenes of destruction. In these visions, natural disasters, such as volcanic eruptions, earthquakes, crashing meteors, forest fires, floods and tidal waves, were combined with images of burning cities, entire blocks of collapsing high-rise buildings, mass death, and horror of wars. Heading this wave of total annihilation were four archetypal images of macabre riders symbolizing the end of the world. I realized that these were the Four Horsemen of the Apocalypse. (pestilence, war, famine, and death). The continuing vibrations and jolts of my pelvis now became synchronized with the movements of this ominous horseback riding and I joined the dance, becoming one of them, or possibly all four of them at once, leaving my own identity behind.

Suddenly, there was a rapid change of scenery and I had a vision of the cave from Plato's Republic. In this work, Plato describes a group of people who live chained all of their lives in a cave, facing a blank wall. They watch shadows projected on the wall by things passing in front of the cave entrance. According to Plato, the shadows are as close as the prisoners get to seeing reality (52). The enlightened philosopher is like a prisoner who is freed from this illusion and comes to understand that the shadows on the wall are illusory, as he can perceive the true form of reality rather than the mere shadows seen by the prisoners. This was followed by profound and convincing realization that the material world of our everyday life is not made of «stuff» but created by cosmic consciousness by infinitely complex and sophisticated orchestration of

experiences. It is a divine play that the Hindus call *lila*, created by cosmic illusion or *maya*.

The final major scene of the session was a magnificent ornate theatre stage featuring a parade of personified universal principles, archetypes – cosmic actors, who through a complex interplay create the illusion of the phenomenal world. They were protean personages with many facets, levels, and dimensions of meaning that kept changing their forms in extremely intricate holographic interpenetration as I was observing them. Each of them seemed to represent simultaneously the essence of his or her function and all the concrete manifestations of this element in the world of matter. There was Maya, the mysterious ethereal principle symbolizing the world illusion; Anima, embodying the eternal Female; a Mars-like personification of war and aggression; the Lovers, representing all the sexual dramas and romances throughout ages; the royal figure of the Ruler; the withdrawn Hermit; the elusive Trickster; and many others. As they were passing across the stage, they bowed in my direction, as if expecting appreciation for the stellar performance in the divine play of the universe.

This experience brought me a deep understanding of the meaning of the archetypal motif of the Apocalypse. It suddenly seemed profoundly wrong to see it as related exclusively to physical destruction of the world. It is certainly possible that the Apocalypse will in the future be actually manifested on a planetary scale as a historical event, which is a potential for all archetypes. There are many examples of situations in which archetypal motifs and energies broke through the boundary that usually separates the archetypal realm from the material world and shaped history. The giant asteroid that 65 million years ago killed the dinosaurs, wars of all ages, the crucifixion of Jesus, the medieval Witches' Sabbath and Dance of Death, the Nazi concentration camps, and Hiroshima are just a few salient examples. But the primary importance of the archetype of the Apocalypse is that it functions as an important landmark on the spiritual journey. It emerges into the consciousness of the seeker at a time when he or she recognizes the illusory nature of the material world. As the universe reveals its true essence as virtual reality, as a cosmic play of consciousness, the world of matter is destroyed in the psyche of the individual. This might also be the meaning of the “end of the world” referred to in the Mayan prophecy.

The observations from modern consciousness research that are most relevant for a positive interpretation of the Mayan prophecy are related to a phenomenon that is much more common in holotropic states than the experience of the Apocalypse; it is the experience

of psychospiritual death and rebirth. This experience has played a crucial role in the ritual and spiritual history of humanity – in shamanism, rites of passage, the ancient death/rebirth mysteries, and in the great religions of the world (see the Christian concept of being “*born again*” and the Hindu “*dvija*” – a “twice-born person”). The process of death and rebirth is a multivalent archetype that manifests on many different levels and in various areas and ways, but in self-exploration and therapy it is usually closely related to the reliving and conscious integration of the memory of biological birth.

Psychospiritual death and rebirth is one of the most prominent themes in therapeutic work using holotropic states. When the age regression in the process of deep experiential self-exploration moves beyond the level of memories from childhood and infancy and reaches the level of the unconscious that contains the memory of birth, we start encountering emotions and physical sensations of extreme intensity, often surpassing anything we previously considered humanly possible. At this point, the experiences become a strange mixture of the themes of birth and death. They involve a sense of a severe, life-threatening confinement and a desperate and determined struggle to free ourselves and survive.

Because of the close connection between this domain of the unconscious and biological birth, I have chosen for it the name *perinatal*. It is a Greek-Latin composite word where the prefix *peri-* means “near” or “around,” and the root *natalis* signifies “pertaining to childbirth.” This word is commonly used in medicine to describe various biological processes occurring shortly before, during, and immediately after birth. The obstetricians talk, for example, about perinatal hemorrhage, infection, or brain damage. However, since traditional medicine denies that the child can consciously experience birth and claims that this event is not recorded in memory, one never hears about perinatal experiences. The use of the term *perinatal* in connection with consciousness reflects my own findings and is entirely new (Grof 1975, 2000).

The perinatal region of the unconscious contains the memories of what the foetus experienced in the consecutive stages of the birth process, including all the emotions and physical sensations involved. These memories form four distinct experiential clusters, each of which is related to one of the stages of the birth process. I have coined for them the term *Basic Perinatal Matrices (BPM I-IV)*. BPM I consists of memories of the advanced prenatal state just before the onset of the delivery. BPM II is related to the onset of the

delivery when the uterus contracts, but the cervix is not yet open. BPM III reflects the struggle to be born after the uterine cervix dilates. And finally, BPM IV holds the memory of the emerging into the world, the birth itself.

The content of these matrices is not limited to fetal memories; each of them also provides selective opening into a vast domain in the unconscious psyche that we now call *transpersonal*. This involves experiential identification with other people and other life forms, ancestral, racial, collective, phylogenetic and karmic memories, and material from the historical and archetypal collective unconscious, which contains motifs of similar experiential quality. Emergence of this material into consciousness constitutes the process of psychospiritual death and rebirth and results in deep inner transformation.

Some of the insights of people experiencing holotropic states of consciousness are directly related to the current global crisis and its relationship with consciousness evolution. They show that we have exteriorized in the modern world many of the essential themes of the death rebirth process that a person involved in deep personal transformation has to face and come to terms with internally. The same elements that we would encounter in the process of psychological death and rebirth in our visionary experiences make today our evening news. This is particularly true in regard to the phenomena that characterize what I refer to as the third Basic Perinatal Matrix (BPM III) (Grof 2000).

As I mentioned earlier, this matrix is related to the stage of birth when the cervix is open and the foetus experiences the tedious propulsion through the birth canal. This stage is associated with the emergence of the shadow side of human personality – murderous violence and excessive or deviant sexual drives, scatological elements, and even satanic imagery. It is easy to see manifestations of these aspects of the death rebirth process in today’s troubled world.

We certainly see the enormous unleashing of the aggressive impulse in the many wars and revolutionary upheavals in the world, in the rising criminality, global terrorism, and racial riots. Equally dramatic and striking is the lifting of sexual repression and freeing of the sexual impulse in both healthy and problematic ways. Sexual experiences and behaviours are taking unprecedented forms as manifested in overtly sexual books, plays, and movies, gay liberation, sexual freedom and experimentation of adolescents, premarital sex, general promiscuity, common and open marriages, high divorce rate, sadomasochistic clubs and parlours, and many others.

The demonic element is also becoming increasingly manifest in the modern world. Renaissance of satanic cults and witchcraft, popularity of books and horror movies with occult themes, and crimes with satanic motivations attest to that fact. Terrorism of suicidal fundamentalist fanatics and deviant militant groups is also reaching satanic proportions. The scatological dimension is evident in the progressive industrial pollution, accumulation of waste products on a global scale, and rapidly deteriorating hygienic conditions in large

solar return was then the alignment of the December solstice sun with the galactic centre, which the Mayans saw as Sacred Marriage between the Cosmic Mother and the Cosmic Father.

Much of the Mayan ritual and art was dedicated to the process of death, from the soul's entrance into the underworld called Xibalba to a final rebirth and apotheosis. Mayan mythology and funereal art described death as a journey whose challenges were known and its important stages



F. Robicsek, *The Maya Book of the Dead*.

Infant with jaguar tail and paws lies on Kawak throne (left); A Hero Twin make an offering or reading gesture with a bundle and feathers and a codex. Vessels from the Metropolitan Museum of Art, New York.

cities. A more abstract form of the same trend is escalating corruption and degradation of political, military, economic, and religious institutions, including the American presidency and government. Scams, shenanigans, and embezzling of astronomical amounts of money on the highest levels of society have become commonplace and reached an all time high.

Ancient Mayans showed profound interest in death and in the process of psychospiritual death and rebirth. They saw it happening on an astronomical level every day watching the sunset and sunrise and every year during December solstice when the sun got “reborn” and its light started returning into the world. The highest octave of this

were depicted on coffins, wall paintings, pottery, jades, and other objects that accompanied the deceased during the great transition. Mayan funeral vases of the Classic period were decorated with paintings depicting rebirth of young lords from cracked skulls, giant turtle carapaces, or other types of enclosures and many sculptures showed similar figures in the process of being reborn from water lilies.

Unfortunately, no specific eschatological texts comparable to the Egyptian or Tibetan Book of the Dead have survived from the Mayan Classical Period, since much of the Maya literary legacy has been lost for posterity. Only a few codices, accordion-like bark paper screen-folds with rich and colourful illustrations, survived the hot and moist climate of Central America and

escaped the ravaging of the Spanish invaders. However, in the 1970s, mayologist Michael Coe, following the suggestion of Lin Crocker was able to distinguish a group of Late Classic black and white funeral vessels painted in the style of the Maya codices, probably by the same artists (Coe 1973). As I mentioned before, cardiologist and archeologist Francis Robicsek was able to assemble substantial evidence for his theory that certain sequences of the vases of the “ceramic codex,” placed in proper sequence, actually represented a “Maya Book of the Dead” (Robicsek 1981).

The images on the funeral vases studied by Robicsek portray the adventures of the Hero Twins, Hun Hunahpu and Ixbalanque, and the story of their ordeals in the underworld and eventual death and rebirth. The reliefs on the stelae at Izapa related to the prophecy concerning the end of the world link the galactic alignment on December 21, 2012, to the Hero Twins journey and to killing of 7-Macaw. They also show the sun deity in the rift of the Milky Way and his rebirth at the end of the Age. This suggests that the Mayan prophecy referred to psychospiritual death and rebirth, rather than material destruction of the world.

Observations from the research of holotropic states of consciousness have thrown new light on human propensity to unbridled violence and insatiable greed – two forces that have driven human history since time immemorial and are currently threatening survival of life on this planet. This research has revealed that these “poisons,” as they are called in Tibetan Vajrayana, have much deeper roots than current biological and psychological theories assume – biology with concepts like the “naked ape,” the “triune brain,” and the “selfish gene” (Morris 1967, McLean 1973, Dawkins 1976) and psychoanalysis and related schools with their emphasis on base instincts as the governing principles of the psyche (Freud 1955, 1961 and 1964).

Deep motivating forces underlying these dangerous traits of human nature have their origin on the perinatal and transpersonal levels of the psyche, domains that mainstream psychology does not yet recognize (Grof 2000). The finding that the roots of human violence and insatiable greed reach far deeper than mainstream academic science ever suspected and that their reservoirs in the psyche are truly enormous would, in and of itself, be very discouraging. However, it is balanced by the exciting discovery of new therapeutic mechanisms and transformative potentials that become available in holotropic states on the perinatal and transpersonal levels of the psyche.

We have seen over the years profound emotional and psychosomatic healing, as well as radical personality

transformation, in many people who were involved in serious and systematic experiential self-exploration and inner quest. Some of them had supervised psychedelic sessions, others participated in Holotropic Breathwork workshops and training or various other forms of experiential psychotherapy and self-exploration. Similar changes occur often in individuals who are involved in shamanic practice or are meditators and have regular spiritual practice. We have also witnessed profound positive changes in many people who received adequate support during episodes of spontaneous psychospiritual crises (“*spiritual emergencies*”). Thanatologist Ken Ring referred to this group of transformative experiences as “*Omega experiences*” and included in it near-death experiences and alien abduction experiences (Ring 1984).

As the content of the perinatal level of the unconscious emerges into consciousness and is integrated, the individuals involved undergo radical personality changes. They experience considerable decrease of aggression and become more peaceful, comfortable with themselves, compassionate, and tolerant of others. The experience of psychospiritual death and rebirth and conscious connection with positive postnatal or prenatal memories reduces irrational drives and ambitions. It causes a shift of focus from pondering about the past and fantasizing about the future to fuller awareness of the present moment. This shift enhances *zest*, *élan vital*, and *joi de vivre* and brings the ability to enjoy and draw satisfaction from simple circumstances of life, such as everyday activities, food, lovemaking, nature, and music. Another important result of this process is emergence of spirituality of a universal and mystical nature that, unlike the dogmas of mainstream religions, is very authentic and convincing, because it is based on deep personal experience.

The process of spiritual opening and transformation typically deepens further as a result of transpersonal experiences, such as identification with other people, entire human groups, animals, plants, and even inorganic materials and processes in nature. Other experiences provide conscious access to events occurring in other countries, cultures, and historical periods and even to the mythological realms and archetypal beings of the collective unconscious. Experiences of cosmic unity and one’s own divinity result in increasing identification with all of creation and bring the sense of wonder, awe, love, compassion, and inner peace.

What began as a process of psychological probing of the unconscious psyche conducted for therapeutic purposes or personal growth automatically becomes a philosophical quest for the meaning of life and a journey of spiritual discovery. People, who connect to the

transpersonal domain of their psyche, tend to develop a new appreciation for existence and reverence for all life. One of the most striking consequences of various forms of transpersonal experiences is spontaneous emergence and development of deep humanitarian and ecological concerns.

Differences among people appear to be interesting and enriching rather than irritating or threatening, whether they are related to gender, race, colour, language, political conviction, or religious belief. Following this transformation, these individuals develop a deep sense of being planetary citizens rather than citizens of a particular country or members of a particular racial, social, ideological, political, or religious group, and they feel the need to get involved in service for some common purpose. These changes resemble those that have occurred in many of the American astronauts who were able to see the earth from outer space (see Mickey Lemle's documentary *The Other Side of the Moon*).

It becomes obvious that our highest priorities as biological organisms have to be clean air, water, and soil. No other concerns, such as economic profit, military pursuits, scientific and technological progress, or ideological and religious beliefs, should be allowed to take priority over this vital imperative. We cannot violate our natural environment and destroy other species without simultaneously damaging ourselves. This awareness is based on an almost cellular knowledge that the boundaries in the universe are arbitrary and that each of us is ultimately identical with the entire web of existence.

In view of the fact that everything in nature runs in cycles and is based on the principles of optimum values, homeostasis, and sustainability, the technological civilization's frantic pursuit of unlimited economic growth, exploitation of non-renewable resources, and exponential increase of industrial pollution hostile to life appears to be dangerous insanity. In the world of biology excess of calcium, iron, vitamins, hormones, or even water is not better than lack of these elements and compounds and unlimited growth is the main characteristic of cancer.

It is clear that a transformation associated with the experience of psychospiritual death and rebirth would increase our chances for survival if it could occur on a sufficiently large scale. The great German writer and philosopher Johann Wolfgang Goethe was aware of the importance of the experience of psychospiritual death and rebirth for the quality of our life and sense of belonging when he wrote in his poem *Selige Sehnsucht*: "Und so lang du das nicht hast, dieses: 'Stirb und werde!' Bist du nur ein trüber Gast auf der dunklen

Erde." [*Blessed Longing*: "And as long as you do not experience this: 'Die and become!' you will be only a shadow guest on the dark earth"].

In the same vein, the famous English poet, novelist, and playwright, D.H. Lawrence, wrote in his poem *Phoenix*:

Are you willing to be sponged out, erased, cancelled,

*Are you willing to be sponged out, erased
made nothing?*

*Are you willing to be made nothing?
dipped into oblivion?*

If not, you will never change.

Holotropic states of consciousness experienced in a supportive environment and under responsible guidance offer thus an opportunity for profound psychospiritual transformation of two different kinds or degrees. An individual who experiences death and rebirth – usually in the context of reliving and integrating the trauma of biological birth – discovers his or her own divinity, sacredness of all creation, and oneness with other people, nature, and the cosmos. Deeper exploration of the transpersonal realms and particularly the experience of the archetype of the Apocalypse then radically changes the perception of the world we live in. We begin to understand that what we experience as material reality might be what the Hindu teachings refer to as *lila* – divine play created by cosmic consciousness. Both of these two forms of spiritual transformation have profound positive effects on the individual's hierarchy of values and life strategy described above.

Various methods of inducing holotropic states – "technologies of the sacred" – have been an integral part of ancient and native cultures for millennia (Grof 2000). Modern humanity has been rediscovering the healing and transformative power of these states in many different contexts. Meditative practices of the great Eastern spiritual traditions and various shamanic techniques are becoming increasingly popular, particularly among the young generation. Translation and publication of spiritual literature of many cultures, recording of their sacred music, and availability of competent teachers have greatly contributed to this process.

The isolation and chemical identification of the active principles of many psychedelic plants, development of new synthetic psychedelic compounds, and increasing knowledge about these substances have been instrumental in inner transformation of many individuals who have used these powerful tools wisely and responsibly. The use of psychedelics – the most powerful means for inducing holotropic states of consciousness – is seriously hindered by legal restrictions, bad and

misleading publicity, and difficulties in obtaining pure materials. However, there exist very effective forms of experiential psychotherapy, such as various neo-Reichian approaches, primal therapy, rebirthing, and Holotropic Breathwork, which can induce these states without the use of chemical agents. Their increasing popularity represents a very promising trend.


Advances of modern medicine have made it possible to save the lives of individuals involved in life-threatening accidents and diseases and have increased the incidence of near-death experiences (NDEs). The development of thanatology, a discipline studying death and dying, has amassed and spread information about these states and made it possible for survivors to use them for positive inner transformation (Moody 1975, Ring 1982, Ring and Valarino 1998, van Lommel 2010). As the economic, ecological, and political global crisis escalates, it instills fear and diminishes hope for fulfilling and satisfying life in the minds of hundreds of millions of people all over the world. The resulting emotional turmoil seems to engender spontaneous psychospiritual crises (“*spiritual emergencies*”) (Grof and Grof 1989, Grof and Grof 1990). Once mainstream psychiatrists recognize that these states have an extraordinary healing and transformative potential - if they are properly understood - and provide support and guidance for this process rather than suppress it by tranquilizers, it could greatly contribute to inner transformation of many people.

As Gregg Braden pointed out, the potential significance of 2012 can be supported by scientific observations (Braden 2007). Astrophysicists have shown that we are at the beginning of a new cycle of magnetic storms (sunspots) that will peak in 2012 with intensity 30-50% greater than previous cycles. Although the solar magnetic storms are cyclical, they have never occurred during the last 26,000 years at the time of galactic alignment and with the population and the technology we have today; it is therefore uncertain what effects this phenomenon will have on our future.

Scientists also agree that the magnetic field of the earth has been rapidly weakening and there are indications that we are in the early stage of reversal of the magnetic poles, which could occur in 2012. Historical analysis shows that periods and areas of weak magnetic fields are conducive to greater acceptance of new ideas and change. Magnetic reversals are rare in the history of civilizations, but common in the history of the earth; at least 14 of them happened in the last 4.5 million years (one of them coinciding with the sudden extinction of the mammoths). However, none of them happened at a time when the planet

had over 6 billion inhabitants with significant number of them depending on modern communication technology – television, radio, computers, and satellites.

We can now return to the main subject of this paper – the Mayan prophecy concerning 2012. Whether or not this was predicted by ancient Mayan seers, we are clearly involved in a dramatic race for time that has no precedent in the entire history of humanity. What is at stake is nothing less than the future of humanity and of life on this planet. Many of the people with whom we have worked saw humanity at a critical crossroad facing either collective annihilation or an evolutionary jump in consciousness of unprecedented nature and dimension. Terence McKenna put it very succinctly: “The history of the silly monkey is over, one way or another” (McKenna 1992). We either undergo a radical transformation of our species or we might not survive.

The final outcome of the crisis we are facing is ambiguous and uncertain; it lends itself to pessimistic or optimistic interpretation and each of them can be supported by existing data. If we continue the old strategies, which in their consequences are clearly extremely destructive and self-destructive, it is unlikely that modern civilization will survive. However, if a sufficient number of people undergo a process of deep inner transformation described above, we might reach a stage and level of consciousness evolution at which we will deserve the proud name we have given to our species: *homo sapiens sapiens* and live in a new world that will have little resemblance to the old one. 

L I T E R A T U R E

- ARGUELLES, J. (1987). *The Mayan Factor: Path Beyond Technology* (Rochester, VT.: Inner Traditions, Bear and Company).
- BRADEN, G. (2007). *Window of Emergence, in 2012: Predictions, Prophecies, and Possibilities* (Boulder, CO: Sounds True).
- CAMPBELL, J. (1968). *The Hero with A Thousand Faces* (Princeton: Princeton UP).
- COE, M. (1973). *The Maya Scribe and His World* (New York: Grolier Club).
- CORBIN, H. (2000). “Mundus Imaginalis, Or the Imaginary and the Imaginal”, in *Working With Images* (B. Sells, ed.): 71-89 (Woodstock, Connecticut: Spring Publications).
- DAWKINS, R. (1976). *The Selfish Gene* (New York: Oxford UP).
- FREUD, S. (1955). *Group Psychology and the Analysis of the Ego*. Standard Edition, vol. 18 (London: The Hogarth Press).
- (1961). *Civilization and Its Discontents*. Standard Edition, vol. 21 (London: The Hogarth Press).

- (1964). *Future of An Illusion* (Garden City, NY: Anchor Books, Doubleday).
- GROF, C. AND GROF, S. (1990). *The Stormy Search for the Self* (Los Angeles, CA: J. P. Tarcher).
- GROF, S. (1985). *Beyond the Brain. Birth, Death, and Transcendence in Psychotherapy* (Albany, NY: SUNY).
- (1994). *Books of the Dead: Manuals for Living and Dying* (London: Thames & Hudson).
- (2000). *Psychology of the Future: Lessons from Modern Consciousness Research* (Albany, NY: SUNY).
- (2006). *The Ultimate Journey: Consciousness and the Mystery of Death* (Sarasota, FL: MAPS).
- AND GROF, C. (eds.) (1989). *Spiritual Emergency: When Personal Transformation Becomes a Crisis* (Los Angeles, CA: J. P. Tarcher).
- HOWELL, A. (1990). *Jungian Synchronicity in Astrological Signs and Ages. Letters from An Astrologer* (Wheaton, IL.: Quest Books).
- JENKINS, J. M. (1998). *Maya Cosmogenesis 2012* (Rochester, NY: Inner Traditions, Bear and Company).
- (2002). *Galactic Alignment: The Transformation of Consciousness According to Mayan, Egyptian, and Vedic Traditions* (Rochester, VT: Bear and Company).
- JUNG, C.G. (1959). *The Archetypes and the Collective Unconscious. Collected Works of C.G. Jung*, vol. 9 (Bollingen Series XX, Princeton, New Jersey: Princeton UP).
- (1959). *Aion. Collected Works of C.G. Jung*, vol. 9.2 (Bollingen Series XX, Princeton, New Jersey: Princeton UP).
- MCKENNA, T. (1992). *Food of the Gods: The Search for the Original Tree of Knowledge* (New York: Bantam Books).
- , MCKENNA, D. AND TAYLOR, Q. (1976). *The Invisible Landscape: Mind, Hallucinogens, and the I Ching* (New York: Scribner Publishing).
- MACLEAN, P. (1973). "A Triune Concept of the Brain and Behavior. Lecture I. Man's Reptilian and Limbic Inheritance; Lecture II. Man's Limbic System and the Psychoses; Lecture III. New Trends in Man's Evolution", in *The Hincks Memorial Lectures* (T. Boag and D. Campbell, eds.) (Toronto, Ontario: University of Toronto Press).
- MOODY, R. (1975). *Life After Life: The Investigation of a Phenomenon - Survival of Bodily Death* (Atlanta, Georgia: Mockingbird Books).
- MORRIS, D. (1967). *The Naked Ape* (New York: McGraw-Hill).
- LOMMEL, P. VAN. (2010). *Consciousness Beyond Life, The Science of the Near-Death Experience* (New York: Harper Collins).
- RING, K. (1982). *Life at Death: A Scientific Investigation of the Near-Death Experience* (New York: Quill).
- (1984). *Heading Toward Omega: In Search of the Meaning of the Near-Death Experience* (New York: William Morrow).
- AND VALARINO, E. E. (1998). *Lessons from the Light: What We Can Learn from the Near-Death Experience* (New York: Plenum Press).
- ROBICSEK, F. (1981). *The Maya Book of the Dead: The Ceramic Codex* (Charlottesville, VA.: University of Virginia Art Museum).
- SANTILLANA, G. AND DECHEND, H. VON. (1977). *Hamlet's Mill: An Essay on Myth and the Frame of Time* (Boston: Godine).
- SCHELE, L. AND MILLER, M. A. (1986). *The Blood of Kings: Dynasty and Ritual Art in Maya Art* (New York: Braziller).
- TARNAS, R. (2006). *Cosmos and Psyche: Intimations of a New World View* (New York: Viking Press).



THE ANATOMY OF INTUITION:

THE EVERYDAY TRANSMISSION OF NONCONCEPTUAL KNOWINGNESS

ROBERT A. MASTERS



Robert Augustus Masters is a highly experienced psychotherapist and trainer of psychotherapists with a doctorate in Psychology, and a teacher of spiritual deepening. His uniquely integral, intuitive work, developed over the past 32 years, dynamically blends the psychological and physical with the spiritual, emphasizing full-blooded embodiment, authenticity, emotional openness and literacy, deep shadow work, and the development of relational maturity.

Robert is the author of eleven books, including Transformation Through Intimacy and Spiritual Bypassing. His essays have appeared in magazines ranging from Magical Blend to the Journal of Transpersonal Psychology, as well as in several anthologies.

INTUITION IS SOMETHING THAT WE ALL HAVE, whether or not we listen to it. It is as natural to us as breathing – but we often tend not to register it any more consciously than we do our breathing. As central as it is to us, it all too often assumes a peripheral or muted position in our consciousness.

So what exactly is intuition?

Some would define it as instinctive knowing, but intuition is more than instinct, carrying instinct's imprint in much the same way that a symphony orchestra carries the imprint – or at least *echo* – of the first musical instruments.

Instincts are *drives*, innate and automatic, taking over with compelling authority when necessity calls, whereas intuitions are *readings*, however instinctually informed, inviting not our submission but our attunement to and alignment with their message, however nonverbally structured that might be.

So instead of being driven, we are guided.

Where instinct is reflexive, intuition is responsive.

Intuition is the result of instinct learning to speak, to represent the reality of what is happening and/or what is needed through fitting messages, verbally, pictorially, and otherwise.

Instinct is a very fast takeover; intuition is a very fast download.

Like instinct, intuition is nonrational (employing no reasoning processes, except perhaps as a clarifying adjunct to its primary message), but where instinct is *prerational*, intuition can be *transrational* to varying degrees (transcending rationality while retaining a functional intimacy with it).

Intuition does not require any dumbing down of intellect, nor an end to abstraction, but rather only enough adequately-lit space in the midst of cognitive/emotional activity so that its messages can be registered with minimal interference.

Like feeling, intuition is much quicker than thought, usually arising fully-formed while our thinking processes are still busy arranging themselves and their platforms. This is highly practical, given that most of our thinking is just noise and clutter and repetitive self-talk, while our intuitions are mostly quite relevant, as well as being delivered without fluff, streamlined down to what's essential.

As five minutes or so of an unwavering witnessing of our mind shows, much of our thinking is no more than internal chitchat, featuring us talking to ourselves (and eavesdropping at the same time) and bouncing between various facets of ourselves (each of which tends to refer to itself as "I"), whereas our intuitiveness involves a much deeper sort of communication (whether verbal or not), conveyed from our depths to our surface.

Intuition is not a thought-out process, but an express visitation from within, as mysteriously formed as it's fitting. Everyday revelation.

It's also important to realize that intuition is not emotion, even though it may at times seem intimately connected with emotion, as if swept in on tides of feeling. Intuition is energetically and emotionally neutral, regardless of its content.

At the same time, however, emotional connection can significantly amplify intuition, not so much because of the fullness or intensity of feeling, but because such connection, with its multileveled richness of interplay, can provide more "meat" for intuition. The more that is happening emotionally between you and me, the more that there is for us to be intuitive about; and the depth and significance of our bond, the tacit

importance and felt sense of it, not only makes mutual understanding and co-evolution more important, but also the intuition that goes along with them. But even though such intuition may carry an emotional wallop, it itself is no more an emotional construct than it is a cognitive one.

Intuition is direct *nonconceptual knowingness*, rooted in near-instantaneous recognition of what is what and its relevance to us. An enormous amount of highly varied data and impressions may be before our intuitive capacity, and it not only scans all of this extremely quickly, but usually also makes compelling sense of it almost as quickly, resulting in a noncognitive recognition of what is actually happening or needs to happen.

This recognition is ordinarily registered first, then felt. All in the blink of an eye. As fast as instinct and with a much wider and deeper perspective. No wonder Einstein called intuition “a sacred gift.” *A sense-transcending transmission that makes sense with palpable immediacy.*

Intuition is more revelation than explanation or description, shining its light with dispassionate accuracy. So revelation arrives, presented in whatever way best works for us (visually for some, verbally for others, a mixture for others), usually followed so quickly by corresponding feelings/sensations – a so-called gut feeling being probably the best known – that it may seem that such feeling arose before the arrival of our intuition.

Even when it concerns extreme difficulty, intuition itself is not desperate. The information it conveys, the directives it clarifies, the situations it sees through, are all transmitted in a neutral fashion, no matter how strong the accompanying emotions may be.

Intuition is our innate wholeness broadcasting live and unedited from our heartland, laying down fitting tracks for us, even if to do so it has to derail our train of thought or otherwise disrupt us. Intuition is not the voice of our disparate selves or thoughts or feelings, but the voice of our essential uniqueness making itself clear, and not necessarily in words.

If we do not consciously hear it, it's not because it is not happening, but because we are not sufficiently present to be aware of such hearing. Intuition is always there, but we aren't.

At the level of pure survival, intuition is not much more than instinct, giving us immediate feedback on how to handle danger or heavy-duty challenge or any situation in which we are very quickly uncomfortable. For example, we are driving through an intersection, and a vehicle to our left is fast approaching us, seemingly oblivious of us; we take all this in – plus the fact that there's another car right behind us and a bicyclist

40 or 50 feet directly in front of us – and know precisely what to do, before any thought can arise. This is a level of intuition we all recognize, in which the optimal move usually makes itself obvious in a split second. Its mix of instinctual reflexivity and panoramic instant-scan allows us to navigate our situation as skilfully as possible (whether we succeed or not).

But even when our survival is clearly not at stake, and we feel relatively unthreatened, intuition still shows up very quickly, popping into being in a fraction of a second. This does not, however, mean that intuition is necessarily without gestation; like everything else, its arising depends on other conditions, which in turn depend on other conditions, all of which (in staggeringly complex ways) set the stage for the arising of a particular intuition. An extremely quick birth is still a birth. It's just that intuition usually makes its appearance already fully formed, like Athena, the Greek goddess of wisdom, springing forth fully adult from the head of Zeus.

We can ready ourselves for intuitive flashes by 1) doing the ground work – gathering relevant material, quieting our mind, opening ourselves energetically and emotionally, listening deeply – and by 2) stepping back after we've done so. It's no accident that so many remarkable intuitions arrive when it seems as if there is nothing else to be done – we lay back, relax, perhaps nap or drift for a bit, with no ulterior motive. And then... shazam! aha! – at least some of the time. No guarantees, but we increase the odds by doing our part as fully as possible.

For example, I may have an idea for a new book, and spend weeks writing whatever comes to mind regarding my topic, with no concern for structure — and then one day, seemingly out of the blue, I simply know the structure, know the thread that runs through the chaos of writings, know where to begin and where to go from there. All in a second.

And many intuitions don't depend on anything in particular for their arising. For example, we're meeting someone for the first time, and in an instant know plenty about them; we have “read” them, not from cover to cover, but enough so that they are no longer a stranger to us. This is akin to a chess game in which we rapidly scan the entire board, sensing the possible moves and countermoves of all the pieces in a few seconds, and then make our move, our pattern recognition having been too quick for any analysis or reflection to take hold.

So what about when intuition doesn't work, messes things up, generates unneeded upset, does damage? I'd say that this is not our intuition's fault, but rather

the fault of how it was *translated* into action. Intuition is a given; what really matters is what we do with it. Yes, listen to it, and listen closely, but also be as aware as possible of the *filters* it must pass through as it shifts from realization to action.

Thus far we've talked about intuition as a solo arising, but it is not limited to being only that. It can also be collaborative (just like creativity essentially is), as when the members of a group get so attuned that a shared intuitive knowing "possesses" them. An obvious example of this is a basketball team getting so in sync that whatever they do – for a time – works beautifully, almost magically, lit by an effortless grace and coordination between all the members. Pure flow, as naturally elegant as it is efficient.

I frequently have seen the same sort of thing in the groups that my wife Diane and I lead, especially right after someone has done a piece of very deep, emotionally riveting work – group members usually enter such effortlessly rich resonance with this person that a kind of group intuition, individually flavoured, flows forth regarding that person. Other times someone will recount a dream they've recently had, and I will ask the rest of the group for their intuitions regarding it. At first such intuitions clearly come forth as solo sharing, but more often than not they start overlapping more and more, morphing in and out of each other, until a few key intuitively-derived insights, collectively birthed, cradle the dream and its significance for the dreamer.

Beyond solo and collaborative intuition is what could be called divine intuition, anchored in deep transconceptual resonance with the ultimate dimensions of Life. Such intuition is as grace-saturated as it is obvious, as subtle as it is lucid, as self-transcending as it is grounded. Here, we know without thinking, see without eyes, hear without ears, love without clinging, cultivating intimacy with all that is.

Divine intuition is what has just kicked in when we *directly* realize the answer to questions like: "Who am I?" or "What am I?" Such answers are not mind-made, photocopyable, or even necessarily true after their moment; they are in fact not so much answers as *raw aha!* responses that indicate a radically full "getting" of the question, an undeniable "grokking" of it. Great joy may accompany such realization; and if it is allowed to coexist with a wisely discerning eye, it becomes a sobering joy, a deeply grounded non-situational happiness (that is, a happiness that does not depend on circumstances).

So there are many levels of intuition, ranging from that of pure survival to that of the profoundest sort of spiritual illumination. We can intuit the best move

in a basketball game (kinesthetic intuition), we can intuit where to sit most comfortably in an uncomfortable room (spatial intuition), we can intuit the underlying motives of the person who is being overly helpful to us (psychological intuition), and we can intuit the presence of unspeakable dimensions of being (spiritual intuition). There is aesthetic intuition – sensing the essence of a work of art in less than a breath; and there is dream intuition – sensing the deeper meaning of a dream in a flash. And so on.

Consider the role of intuition in psychotherapy. Much of psychotherapy, especially of the cognocentric variety, at best only assigns intuition a peripheral role in the therapeutic process, as if it is far less important than rational thought and analysis. Some psychotherapy, especially of the New Age variety, tends to go to the other extreme, overassociating intuition with various psychic capacities, while undervaluing rationality. Between these extremes are psychotherapeutic approaches that, to varying degrees, value both intuition and rationality. The most effective of these are those that are truly integral in nature, working in real depth with our mental, physical, emotional, energetic, sexual, social, and spiritual dimensions.

Intuition plays a role, however marginal, in all psychotherapy. It perhaps flows most freely in approaches that do not operate from behind preset methodologies, approaches in which structure is allowed to arise in accord with clients' needs and energies. When psychotherapists are not relying on a certain methodology, but are simply present with their clients, they are more intuitively connected to those with whom they are working, being therefore much more sensitive to subtle signals which may, if attuned to, redirect the session in more fruitful directions.

Intuition is revelatory nonconceptual understanding, lit by undeniable resonance with the deeper currents of what is happening.


When intuition shows up without any significant mental or emotional interference, we know that we know without any need to prove that we know – intuition is that self-evident, conveying opinion-transcending savvy, needing only adequate reception from us to fully download.

Some call intuition our sixth sense, but it is more of a *meta-sense*, a sense-transcending attuning that encompasses and employs the other senses in its translation into meaningful messaging and corresponding action.

Some overspiritualize intuition, treating it as something orchestrated by God, but it is simply part of our equipment, no more or less sacred than anything else that constitutes us. That said, intuition is a marvellous thing, a visitation for which we ought to be grateful,

a multidimensional navigational aid, a clear steady voice in the wilderness of our being.

Let us listen to our intuition very closely and with great respect, separating it from those thoughts and feelings that would usurp or masquerade as it. Intuition flows through all that is, speaking whatever language is needed, creating a communicative network that touches one and all. Let us be grateful for it.

And let us give our intuitive capacity more than our ear, until it is not so much an “it” as our unveiled unique essentialness absorbed in pure communication, transmitting what serves our highest good, regardless of its reception. 



INNER CREATIVITY:

A NEW PARADIGM FOR ADULT SPIRITUAL DEVELOPMENT

AMIT GOSWAMI



Amit Goswami is Professor Emeritus in the theoretical physics department of the University of Oregon, Eugene, Oregon, US where he has served since 1968. He is a pioneer of the new paradigm of science called “science within consciousness”.

Goswami is the author of the highly successful textbook Quantum Mechanics that is used in Universities throughout the world. His two-volume textbook for nonscientists, The Physicist’s View of Nature traces the decline and rediscovery of the concept of God within science.

Goswami has also written many popular books based on his research on quantum physics and consciousness. In his seminal book, The Self-Aware Universe, he solved the quantum measurement problem elucidating the famous observer effect while paving the path to a new paradigm of science based on the primacy of consciousness. Subsequently, in The Visionary Window, Goswami demonstrated how science and spirituality could be integrated. In Physics of the Soul he developed a theory of survival after death and reincarnation. His book Quantum Creativity is a tour de force instruction about how to engage in both outer and inner creativity. The Quantum Doctor integrates conventional and alternative medicine, while in God is Not Dead he explores what quantum physics tell us about our origins and how we should live.

In his private life, Goswami is a practitioner of spirituality and transformation. He calls himself a quantum activist. He appeared in the films What the Bleep Do We Know, The Dalai Lama Renaissance, and The Quantum Activist.

He teaches fairly regularly at the Ernest Holmes Institute; the Philosophical Research University in Los Angeles; Pacifica in Santa Barbara, CA; and UNIPAZ in Portugal, and is a member of the advisory board of the Institute of Noetic Sciences.

PEOPLE GENERALLY PRACTICE SPIRITUALITY under the aegis of a religion. But religions are based on a particular creed; not much consensus there about the nature of reality or God – the head honcho of reality. The word religion originated from the Latin *religere* which means to reconnect. The idea of spiritual salvation is to save oneself from sin (separateness) and reconnect with wholeness (God) in heaven. But how many people today do you meet who

interpret spiritual search this way? Different religions tell you different things. Also, most religions talk about spiritual paths as if there is a charted path to follow and achieve your goal. Some religions even talk about a guru, an enlightened teacher-guide who can take you to the promised land. Just follow him.

If you try a continuous path, any religion, doesn’t matter, you will most likely be disappointed, guru or no guru. What are the religions missing? The good news is that there is a new science to guide you, you should see the path clearly with its help. According to the new science (Goswami, 2008):

- Consciousness is the ground of all being.
- Manifest actuality is preceded by possibilities – quantum possibilities. Conscious choice converts possibility into actuality. Since this choice is exerted from a non-ordinary state of consciousness “higher” than our ordinary ego, we call it downward causation. We will refer to this higher consciousness as *quantum consciousness*; spiritual traditions refer to it as God.
- Within one undivided consciousness, there are four worlds of quantum possibilities wherefrom, via downward causation consisting of conscious choice, come all our experiences: the material world that we sense, the vital world whose energies of movement we feel, the mental world that we think and process meaning with, and the supramental world of (Platonic) archetypes – truth, beauty, love, goodness, justice, etc – that we intuit, that give us values.
- Conscious choice precipitates the *collapse* of the multifaceted quantum possibilities (waves of possibility) in the domain of transcendent potentia in each world to become actuality (particles of actuality) in the immanent domain of manifestation. The transcendent wave and immanent particle are complementary modes of movement in each world. The multiple parallel worlds do not directly interact; consciousness mediates their interaction through simultaneous choice and collapse (change) of possibility into actuality.
- Collapse is nonlocal meaning that it requires no local interaction, no local communication involving the exchange of signals. Locality – the idea that communications require signals – holds true only for space-time. *Nonlocality* is signalless communication

taking place “outside” of space and time. Quantum consciousness is nonlocal, choosing from itself, from its own possibilities.

~ Collapse is discontinuous. Before collapse, quantum possibilities, waves of possibilities really, reside in transcendent potentia, outside space and time. Collapse changes the waves into immanent particles in space and time. Do you see why *discontinuity* must prevail. How else can you depict “outside” space and time? If “outside” space and time were continuous with what is inside space and time, we could just expand the boundaries and include it, couldn’t we? The word transcendent reminds us of both nonlocality and discontinuity.

~ In transcendent potentia, consciousness remains undivided from its possibilities and there is no experience. This is what is called *unconscious* in depth psychology although it has acquired a much wider meaning now in agreement with experimental data (see Goswami, 2008). Collapse produces “dependent co-arising” of an experiencing subject and an object that is experienced. The subject is not a mere artifice of language. A subject is a person with a brain with which consciousness identifies (see chapter 3). The self-identity (called the *quantum self*) follows from a relationship of circular causality (called *tangled hierarchy*, Hofstadter, 1980) that exists between brain apparatuses of perception and memory – perception requires memory, memory requires perception.

~ The subject of immediate experience is the quantum self which is universal, not individual. The individual identity (*ego*) results from conditioning (Mitchell and Goswami, 1992).

~ Creativity is fundamentally a phenomenon of consciousness discontinuously manifesting *really* new (previously unmanifest and unconscious) facets of possibilities from the transcendent potential to the immanent domain of manifest actuality. Now you see why in ancient traditions, creativity is referred to as a marriage between (transcendent) heaven and (immanent) earth. The discontinuity of creative experience revealed as a “aha!” surprise is called a quantum leap of thought in analogy with the electron’s discontinuous quantum leap from one atomic orbit to another without going through the intervening space.

~ Creativity that we engage with today is mental creativity, it is about mental meaning. The mind gives meaning to the interaction of consciousness and matter. Think of yourself watching TV. All those pictures are simple electronic movements on the screen. Who puts into those electronic patterns the picture of Jenny becoming angry with her boyfriend for paying too much attention to Violet? You do, with the help of your

mind (Sperry, 1983). It’s routine when we watch TV. But when our minds are leaping to something new that brings new meaning via quantum leaping, we are creative.

~ We value what we intuit, what Plato called archetypal contexts of thinking: love, beauty, truth, justice, goodness, stuff like that. What is truly new is new meaning invented or discovered using old or new archetypal contexts and combinations thereof. This is the true nature of creativity.

~ When creativity is directed toward producing an outer product we call it *outer creativity*. Creativity directed inwards toward transformation is inner creativity. Spiritual development requires *inner creativity*.

~ The creative process has four stages: preparation, unconscious processing, sudden insight, and manifestation (Wallas, 1926).

~ The role of the brain is that we use the brain to make representations of mental meaning; in the process we make software in the brain’s computer hardware.

Okay, we do develop an ego as adults, an individuality, a separateness. Religions prescribe weakening the ego; this they say will make God (wholeness) the presiding master of your life. But animals have weak ego; that does not make them particularly spiritual. People have been following the religious prescription for millennia; where is the result? The truth is we cannot even follow the dictates of values like love in our lives. There is no continuous path from the ego-separateness of base emotions and reason-based living to the nonlocal wholeness of the land of a higher value; it takes a quantum leap, often a lot of quantum leaps. And how do we do it? How else but by following the creative process? This is inner creativity, of course.

Making this conceptual shift is a major achievement. Continuous paths, a guru saving you from sin, sound so simple. And leaps are risky, especially quantum leaps; you don’t know where they will take you.

Relax. The new science is giving us some guidelines. Ask yourself: what brought about the idea that you want to try “religion” or “spirituality?” Most likely, you will realize that it is a general dissatisfaction with life’s sufferings. Not enough pleasure to make up for them! Even if you are a creative person, your outer accomplishments are not bringing much satisfaction.

Only by addressing our lack of satisfaction with outer activities alone, do we make room for inner creativity, for transformation. And again, the religions and even esoteric spiritual traditions have created much disappointments in our pursuit of spirituality by making it an all or nothing proposition. Connect to God or

bust. God-realization (in some traditions the goal is called self-realization) is the only goal of life or at least the supreme goal! So kill the ego, the source of your sin. Surrender to God or at least to your guru. And humanity is pursuing this supreme goal for millennia trying to kill the ego and surrender to God. Look around. Do you see too many enlightened people?

Realize this. Ego-agendas are laden with many desires to accomplish (the nature of the beast), and desires are often conflicting. For example, suppose I have a desire to succeed in my search for God, and I want to work hard to that end; but I also want to enjoy life, spend time with my friends, succeed in my job, and so forth – the desires are not compatible. The first requires killing the ego; the others require keeping the ego in tact or even enhancing it if the accomplishment requires creativity. This kind of conflict brings about tension, unease, more suffering not less.

Now ask. What motivates you to engage in outer creativity? The unconscious calling you! The archetypes calling you! The universe calling you! So you take your quantum leap, and made a representation of the archetype as an outer product for others to share. Realize that outer accomplishment is no longer enough. Bingo! Turn your accomplishment orientation inward, toward making representation of those archetypes in your living. The product of manifestation of the creative exploration of archetypes is now a new adult ego with an enlarged relatively conflict-free, positive relationship with the world, increased emotional intelligence, an increased access to the quantum self.

Do you see? You go about inner creativity first with this goal of embodying the archetypes in your living and do it one after the other. Engage in relationships; discover unconditional love. Manifesting archetypes like love in your living will produce a brain circuit of positive emotion. Follow this strategy to emotional intelligence – balancing your negative emotions with the positive. Engage with ethics with the idea of living ethics and discover the archetype of goodness. Engage in deep ecology and teach yourself to be in harmony with your environment. And so on. Too much for one life? Of course it is. But you can do it over many reincarnations.

This is important, so let me repeat. The creative exploration of archetypes requires a strong ego. Moreover, these creative accomplishments, even though inner, always strengthen the ego. Surrendering the ego in favor of God or quantum self-identity requires the weakening of ego's narcissism. The two processes are antithetical and must be done in steps.

Do you see that a day may come when you are tired of accomplishments, even inner ones. You have done them all, been there, done that. Now is the time to give up the ego. Now is the time to go all out, God realization or self-realization whatever you want to call it.

One more comment. When you put your initial goal of inner creativity as embodying the archetypes, you can easily see that you don't necessarily need to be motivated from the negative side of things – suffering. Another intuition that can initiate the creative exploration of the archetypes is curiosity: for example, what is it like to love unconditionally?

The truth is, under the aegis of scientific materialism which holds that matter is the ground of being, in the economically advanced countries, we have become experts in pleasurable living and have become very capable of hiding suffering under the rug. Consequently, the negative path draws few people to spirituality today except that some people do get bored with pleasure seeking. If you are one of them, your call for inner creativity will come from the positive side – curiosity. Hear the message that only a few people can change the world that many of us are intuiting and that Rupert Sheldrake first made into a scientific viability. Are you one of these people? Are you curious to find out by engaging inner creativity?

Ego development not only involves developing a character of habit patterns and learned contexts but also developing a persona consisting of various masks that tend to maintain a self-image. We want to please other people, so we wear these masks to meet their expectations of who they think we are. The first stage of developmental inner creativity turns out to be shedding the self-image and becoming who we really are: our character, our authentic self. To the extent that we have self-image, we are much like actors. Richard Feynman wrote a book named *What do you care what other people think?* We make this our motto.

INNER CREATIVITY IN ACTING

Is there creativity in acting? Actors and actresses perform in the outer arena, but they do not create anything new in the sense of outer creativity. However, they do delve into inner creativity (and perhaps even in outer creativity to the extent that their performances precipitate in the audience an encounter with meanings and archetypes).

In Shakespeare's time, enacting a tragedy was the actor's way to practice transcending the ego/persona level to the authentic-self/character beyond the masks. The noble heroes of Shakespearian tragedies

suffer from inner conflict because of the masks that they wear. There is no resolution except to take off the masks, which is portrayed as death.

Take the case of Hamlet. He is torn between the ethos of the time – the ego’s ethos – of avenging his father’s murder and a higher ethos – thou shalt not kill. Both were expected of him and were part of his persona; but neither were part of his character. The only resolution was tragedy, the death of the persona, which in his case occurred through actual physical death.

In primitive cultures, acting involves wearing masks, by which process the wearer becomes the god or animal that he or she is portraying. But anthropologists have noted that masks are worn to stimulate transformative experiences, they are vehicles for inner creativity, for finding behind the masks the unity of the character/authentic self. “In these masks you continually find beings transforming into other beings. A man is a bear; a bear is a killer whale. The artist is showing a shared spirit – that all beings are in some way the same.”

Today, instead of Shakespearian tragedies, we are back to a more primitive form of acting, except that the actors and actresses wear more subtle masks; the characters are usually ordinary people, not gods and animals. But the purpose of acting remains the same – to discover for oneself the unity of the authentic self behind the diversity of different masks and their different melodramas. “At one point,” muses the actor Louis Gossett about a role that he successfully played, “I don’t even know who I am anymore. By the story’s end he’s (the character) grown into his truest self, and I didn’t quite realize what a deep thing that would be to me. When you start to implement yourself and use your soul, you discover more.”

Unfortunately, today many actors and actresses get caught up in living the life of many personas and the mind of many masks. Instead of exploring deep into their psyches beyond the masks, they investigate horizontally, expanding the repertoire of masks they are capable of wearing to hide their authentic self from themselves. Thus their performances are no longer ones of the creative discoveries of his or her authentic unity but mere technique in the craft of acting.

This then is the lesson. You can live life expanding your repertoire of masks and go deeper and deeper into illusion that these masks create or you can act the masks out with always the goal of transcending the mask to unmask yourself. The more unmasked you are, the easier it is to begin the creative journey of the authentic exploration of the archetypes.

The truth is, the masks are also representations of the archetypes, but without any authentic experience of them, we cannot truly live them; they are

based on what we think the archetypes are and mere thinking does not make brain circuits that we can evoke easily without effort when we most need them. Then we play act them and make them part of our false self-image. In the process of self-discovery, we play act them with the idea of getting rid of them as part of the preparation stage and delve into the rest of the creative process with authenticity.

A powerful (and perhaps indispensable) practice for making life into a union with the authentic self is self-observation, a radical, unflinchingly honest, yet non-judgmental observation of your play-acting behaviour with others – specific rationalizations, justifications, and other defences – coupled with self-inquiry into your inner motivations, feelings, and thoughts while you are doing it. With ongoing awareness, you can penetrate deeper and subtler layers of defensive camouflage, a process that is by turns profoundly illuminating and acutely painful. Do this practice with compassion for yourself, a compassion that, with advancing practice, will deepen and extend to others.

INNER CREATIVITY IN RELATIONSHIP

While acting, we wear masks and assume someone else’s identity to explore and gain insight about our own masks of self-image. In relationship, we have the opportunity to be in somebody else’s shoes but more subtly.

The problem is, our ego thrives in homeostasis. This includes not only our own habits and patterns, but also the tendency to manipulate others in relationship into the mould of our own self-perception. And if we allow movement in a relationship, it is often a horizontal movement within the contexts defined by our own ego. Breaking through these tendencies is a creative challenge, and the kind of creative acts that penetrate such an impasse and restore fluidity to frozen or static relationships has within them the capacity to catapult us beyond ego. In other words, growing in a relationship is inner creativity.

Women’s *spirituality* traditionally has always emphasized relationship (Anderson and Hopkins, 1991). And thanks to the women’s liberation movement and, more recently, the men’s movement and the work of such people as the poet Robert Bly, the demanding “R” word is no longer anathema to men, even in the West (Bly, 1992).

There are many kinds of relationships that we live and all of them afford us opportunities for exploring archetypes. Below, I will take one such archetype – love – and examine how intimate relationship can act as a catapult for discovering love.

PREPARATION: FROM SEX AND
ROMANCE TO COMMITMENT

In the 2012 election campaign, a conservative (Republican) presidential candidate laid out the republican doctrine that sex must be used for reproductive purpose only. In contrast, liberals under the influence of scientific materialism tend to use sex mostly for pleasure. Human evolution of consciousness demands more of us than these two primitive use of sexuality.

Because of the instinctual brain circuits, our sexuality is aroused easily and often by a variety of stimuli. When we are teenagers and these feelings are unfamiliar we become confused about our sexuality. Most societies have a taboo against educating the young about sexuality. In some spiritual societies, the idea of celibacy is introduced for the young. Unfortunately this is often done without much guidance as to why or how. The original idea could have been good: remain celibate until you discover romantic love when you will no longer be confused about the creative potential of your sexuality (beyond procreation and pleasure). Romantic love, the ancient traditions intuited, is the doorway of a creative journey toward archetypal love. But without any avenue for such education, how is the confusion going to go away?

If a teenager goes into sex without understanding the creative potential and purpose of sex (and now I am not talking about “the birds and the bees” reproductive aspect of sex here that is generally taught in schools as sex education), he or she will blindly respond to the brain circuits and look upon sexuality as a gratification, as a vehicle for a unique kind of intense pleasure. Since the fulfillment of sexual pleasure with a partner raises vital energy to the third chakra associated with the ego identity with the physical body, a sense of personal power enters the equation. Hence it is common to think of “sexual conquests” in connection with sex that is not associated with romantic love. Recall that sex in romantic love raises the energy to the heart chakra.

In the Western world, the pattern that has developed over the last few decades, at least for men, is this early conditioning of sex for power. Women, thanks to some protective (“conservative”) parents are somewhat exempt, although that is rapidly changing. What happens when we eventually discover a partner with whom our heart chakra resonates? We enter the romantic love relationship, but we tend not to give up the habit of conquest. So when the romance runs out, which it does sooner or later because of our tendency to habituate every new experience, the sex-for-power tendency returns. We then have a choice. We can look for another romantic partner, or go deep in the existing relationship to explore its creative potential.

Hence the social custom of a man being the one who asks his romantic partner to enter marriage. To enter marriage is to change the equation of sex: I will commit to change my pattern of using sex for power to using sex always to make love. Which means we always allow the energy to rise to the heart after a sexual encounter, we allow ourselves to become vulnerable. Marriage is a commitment to make love, not war (to conquest).

Unfortunately, this vital body agreement concurrently has to find agreements between the mental bodies of the partners as well. For mental bodies of a couple, the individual ego conditionings are very deep; in the arenas of overlap of ego activity there will be territoriality, and competitiveness will emerge and bring the energy down from the heart chakra to the navel chakra once again resulting in a return to narcissism. A man says to his wife when she expressed dissatisfaction with their marriage: “I don’t get it. Your job is to make me happy. I am perfectly happy. So what’s the problem?”

The competitiveness and other negative emotions will relent only when we begin to intuitively glimpse that it is possible to surrender the negative emotions within the positive energy of love.

A cartoon describes the situation with the narcissism of the ego perfectly. Calvin says, “I am at peace with the world. I’m completely serene.” When pressed by Hobbes, he clarifies, “I am here so everybody can do what I want.” From this place, we can love only magnanimously, from the superior level in a hierarchical relationship. But this is not love and leads to isolation. When we become aware of our loneliness, in spite of having friends and partners, we begin to inquire why we are lonely, why we do not feel loved, and why, in truth, we cannot give unselfish love either. We have an open mind. We become curious: if we give unconditional love, does the emptiness fill up? We can stoke the fire of curiosity until we have a burning question.

It is then that we are serious about engaging the creative process of discovering love, we have done the basic homework, the basic preparation. The next step is unconscious processing.

UNCONSCIOUS PROCESSING IN
THE EXPLORATION OF LOVE

Our conditioning does not allow incoming stimuli to evoke all possible responses in our mind-brain-vital body complex. Instead our conditioning acts like a slit that permits us to process the stimulus in the same conditioned perspectives that we have seen it before. It is very much like the case of the electron passing through a single slit before falling on a fluorescent screen. It appears right behind the slit, only a little

blurring of its image due to diffraction gives away that the electron is still a wave of possibility and not an entity of complete fixity of a point. But if we pass the electron through a double slit, the possibility pool of the electrons is enhanced enormously for additional unconscious processing.

In the double-slit experiment, a beam of electrons passes through a two-slitted screen before hitting a second fluorescent screen. After passing through the two slits of the first screen, the possibility wave of each electron divides into two waves that “interfere” with one another; the result is displayed as spots on the fluorescent screen. If the crests of the two waves arrive together at a place on the screen, we get constructive interference – reinforcement of possibility – the probability for an electron to arrive is maximum that shows as bright spots on the screen. Crest and trough arriving together at a place make destructive interference – no possibility of any electron landing there at all – and show as dark regions on the fluorescent screen. The total pattern, called an interference pattern, consists of these alternate bright and dark regions. Compared to the single slit pattern, there has been an enormous enhancement for the pool of possibilities available to the electron.

What does all this have to do with the creativity in relationships? Unconscious processing always precedes a creative insight. The more we are able to generate quantum waves of many possibilities in our unconscious mind, the more is the efficacy of unconscious processing.

Having a committed intimate relationship is like having a double slit to sift all your incoming stimuli through in this way enhancing your possibility pool for unconscious processing. The truth is, you may not yet consciously recognize your partner’s contexts for looking at things; but your unconscious is already considering them, hence the change. Your possibility pool to choose from is now much bigger, and chances are better that new possibilities for creativity are already there for the quantum consciousness to enter the picture and choose. With this strategy, sooner or later, you will fall into a creative intuition of the “otherness” of the other (to use sociologist Carol Gilligan’s language), not unconsciously, but consciously. You and your intimate “enemy” have seen the first glimpse that you can become intimate friends.

INVITING QUANTUM
CONSCIOUSNESS TO RESOLVE
YOUR CONFLICTS:
THE DO-BE-DO-BE-DO
OF UNCONDITIONAL LOVE

After it dawns on both you and your partner that your intimate enemy can be your intimate friend as

well, a truly respectful relationship can begin and you can take more risks. It is in this process of risk taking that your intimate enemy–future friend can become a huge boon. Your partner is already a boon because she/he introduces a second slit of a double slit arrangement through which the stimuli you process are sifted allowing an enormous proliferation of possibilities. Is there any other way to enhance the possibility pool to choose from even further? Is there any way to guarantee that there will be new possibilities in the pool?

In the movie, *The Wedding Date*, to my great satisfaction the hero said to the heroine something to the effect, “I want to marry you, because I’d rather fight with you than make love with another person.” To practice unconditional love, it is important to recognize your love partner shamelessly as also “the intimate enemy.” The behavioural advice is to use reason to settle the differences that cause fighting (“renegotiating your contract”). But unfortunately this amounts only to suppressing emotions. Or if emotions break out anyway, the behavioural advice is to leave the scene, to not to let things “get out of hand,” or “to kiss and make up,” which is usually a pretension until sexual instinct takes over. These are perhaps good advice for people who are not ready for unconditional love. But for you the inner creative, your challenge is to love your partner in spite of your differences. And when these differences cause a fight, then so be it. Remain in the fight explicitly or implicitly until a quantum leap takes place or until the situation become unbearable at your present stage of personal emotional maturity.

Unresolved conflicts are guaranteed to bring new possibilities in your pool for unconscious processing, and who can process the new but quantum consciousness/God? Gradually, we become capable of waiting out unresolved conflicts indefinitely until downward causation resolves them giving us experiences of tangled hierarchical quantum self and the archetype of love. In that experience, you discover self-reference as a couple: now not only are there the individuals, you and he (she), but there is also we.

The practice, to hold unresolved conflicts indefinitely until resolution comes from higher consciousness is a difficult practice, but the rewards of its manifestation stage are enormous. The conditions that you impose on your love now fall away with some effort as new brain circuits of love take form. The making of a love circuit in your brain helps you to balance many of your negative emotions – fear, hate, competitiveness etc. The Beatles were right when they sang “All we need is love.”

And then we have choice. Once we can love unconditionally, sex is a choice. We do not need it to make love. We have a love circuit in our brain now. We can

still include sex in our love relationship if appropriate and if we so choose of course, but sex is no longer compulsory. We don't have to engage in it helplessly. In this way, the whole world can become our family.

THE AWAKENING OF SUPRAMENTAL INTELLIGENCE

There are many archetypes of the supramental: love; beauty; justice; goodness, and truth are some of the major ones. In our journey of transformation, we have to explore each of the major archetypes. Each creative exploration will give us upon fruition a brain circuit of positive emotion that will help us balance the negative in our life. The primary objective is to move beyond mental intelligence that does not bring us happiness.

The creative exploration of unconditional love helps us develop emotional intelligence – the ability to hold intimate relationships and maintain emotional equanimity in general.

Let's talk about ethics. To be ethical, each of us has to discover creatively the truth of "Love your neighbour as yourself" which means "be good to your neighbour." Only when, in a direct quantum leap (an insight), you experience your oneness with your neighbour and manifest the truth in your life by making a brain circuit, can you really live this truth with some genuine effortlessness and consistency. Being good to your neighbour then becomes an ongoing renewal of relationship – grounded not in rote fixity but in present-centered creative fluidity. You have discovered ethical living. You must similarly discover all spiritual themes of life – respect, humility, justice, and other time-honoured values – if you want to live them.

The ecologist Arne Ness gave us the concept of deep ecology (Duvall and Sessions, 1985). Etymologically, eco comes from the Greek word *eikos* (meaning place) and logy from the Greek *logos* (meaning knowledge). So ecology is about knowledge of the place we live. But in truth, we live not only in our external environment but also in our internal environment. Deep ecology is about the knowledge of both our external and our internal subtle worlds and it appeals to us to take ethical responsibility for both our gross and subtle worlds.

As our archetypal accomplishments accumulate, there begins a shift of the ego-identity to a more balanced relationship of the ego and the quantum self. I call this shift the awakening of supramental intelligence, called *buddhi* in Sanskrit. Etymologically, intelligence comes from the root word *intelligo* that means "to select among." Indeed, with the awakening of supramental intelligence we begin to

become aware that we are choosing or selecting from among the possibilities available. Only then, we begin to take responsibility for our choices. We grow up, in other words.

The supramental intelligence level of being brings a welcome freedom from compulsive self-preoccupation. You may sometimes feel this freedom when you sing in the shower or walk in the woods. But can you imagine feeling that kind of freedom during what you call chores, what you call boredom, or even what you call suffering? It is like dancing through life. "Will you, won't you, will you, won't you, won't you join the dance?" This exuberant invitation from Lewis Carroll is always open to all of us, but we thrive in this dancing only when supramental intelligence awakens.

The psychologist Carl Jung (1971) also put considerable emphasis on inner creativity of adult development, which, he said, leads to "individuation" – a stage of development in which the person's individuality is firmly established within a cosmic unity. The concept of the awakening of supramental intelligence is similar.

INNER CREATIVITY: SELF REALIZATION

Accomplishing the brain circuits of positive emotions and acquiring emotional intelligence, ethical conduct, deep ecology, and all that keeps us happily busy for many incarnations. Eventually, even this urge to explore begins to habituate. We tend to become bored – been there, done that. Then what develops is a deep unending unease that the Buddha called *dukkha*. This is the realization of Buddha's first noble truth – life is suffering. Suffering comes from the duality of living in the two self identities – ego and the quantum self. Any separation from wholeness, such as ego-identity itself, is experienced as suffering. Now the inner-creativity initiate is motivated to end suffering. To go beyond the accomplishment-oriented self to a state of "no ego-self." This is the journey of self-realization approaching from the negative side.

Accomplishments of supramental intelligence bring us satisfaction, but even more enticing than satisfaction is the spiritual joy (that Hindus call *ananda*) that a creative feels at the moment of the quantum leap, as a by-product of the unity with the quantum self. Gradually, after many peak experiences, the curiosity becomes intense, becomes a burning question: can I go beyond duality, can I shift my identity to the quantum self and forever enjoy the bliss of that union? To some explorers, the quantum self reveals itself as an archetype – the self archetype – almost like any other archetype. This leads to the intense desire, to know the true self – the nature of

consciousness itself. This fuels the inquiry – who am I? What is the true nature of my self? Where is it rooted? This time it is *via positiva*.

But either way, via negative or via positive, very soon it becomes clear that now the spiritual journey is very different – we have to detach from the ego-identity, give up the accomplishment orientation, etc.

There is a lasting myth in some spiritual traditions that to be truly initiated into a path of self-realization, you must have a guru, an enlightened teacher. But the quantum self, the Holy Spirit, is the guru, as some of these traditions explicitly acknowledge, and it is not really separate from us. If you are sinking into quicksand, you cannot pull yourself up by your own bootstraps; a law of Newton prevents you. But it is possible to bootstrap yourself out of the quicksand of ego-identity. This is because the ego-identity is not compulsory, only some of the ego-functions are. The ego's simple hierarchy and its narcissistic perspective is an aberration (albeit a necessary one for the creative journey) on the clear consciousness that is the Holy Spirit. To expect another, guru or not, to do your creative work for you is to perpetuate the aberration.

The problem is that in inner creativity of self-realization you are trying to lift yourself beyond the simple hierarchy of the ego-identity to the tangled hierarchy of the quantum self. You cannot reach a relationship based in a tangled hierarchy through one that demands a simple hierarchy, as in some power-based guru-disciple relationships. If perchance you encounter one of those rare individuals who understands and engages in tangled-hierarchical relationships with the world, that's different. In India, such a guru is called a *sadguru*.

Now comes the quintessential question. How are the stages of inner creativity that catapult us into the exalted realization of the quantum self of being, the realization that I am the quantum self, different from the usual stages of creativity – both inner and outer?

INITIAL PREPARATION

Part of the preparation for the spiritual journey of inner creativity used to be the study of the literature in order to achieve an intellectual understanding of the philosophy of consciousness as presented by philosophers and mystics through the ages. If you were part of a religious lineage, you studied the scriptures with the motivation of understanding the meaning behind the form. You also investigated the meaning of particular rituals and practices.

You would also find a guru, and not necessarily a human guru, to surrender your ego. It took many

years of study, rituals, and meditation (much like the creative process today) to break through and have the realization that “I am the innermost self.” In Hinduism this was called the culmination of *gyana* (Sanskrit word for wisdom) yoga. In other traditions, this goes by a different name. But the point is that this wisdom did not help much. You would know the truth, but you still would not know how to live it. So after the dawning of wisdom, you went to practice love (*bhakti* yoga in Sanskrit) etc., moving through the archetypes.

Some traditions such as Christianity and Sufism tried to reverse the procedure, love before wisdom. But this did not work well either because without wisdom it is very difficult to master the conviction (faith) in quantum consciousness to take on the journey of self-realization.

Today, as the science of self-realization is becoming clear, it is becoming easy. We have discovered a new *gyana* yoga, Western style. Get your wisdom from the theoretical resolution of quantum paradoxes (Goswami, 1993); next convince yourself that the important elements of the theory such as nonlocality and downward causation are experimentally verified. In this way you will gain faith that this new science is proper science and it does not fail you, it cannot. This is part of your preparation. This is, in Buddha's terminology, right thinking.

At the next stage of your preparation, you investigate the archetypes. This takes many lifetimes, so in this lifetime if you already have detachment from accomplishments (this detachment is called *vairagya* in Sanskrit) and yet love, ethics, deep ecology, and emotional intelligence come easily for you, then you know you are ready for the final journey of self-realization. You know already how to live your right thinking. In Buddha's terminology, this is called right living.

If some aspect of right living is still lacking, finish it. Otherwise, the need for accomplishment will still be there after you experience self-realization and will mess up the all important manifestation stage. There are many self-proclaimed gurus today accomplishing away and enjoying the ego pleasures inappropriately causing much confusion. It does not mean that they are not self-realized; but it does mean that they have not been able to take upon themselves the task of fully manifesting the quantum self-identity from which only befitting action would flow.

The final preparation for the journey of self-realization is to find right livelihood for yourself. And this consists of the life of a renunciate, no less. This means only one thing: you must not use your livelihood for accomplishing anything that leads to ego

building. Don't worry! If you are ready, this step will not take much effort.

ALTERNATE WORK AND
INCUBATION:
WILL AND SURRENDER

As with outer creativity and also with the inner creativity of transformation, much of the work of inner creativity of self-exploration is unconscious. In inner creativity of accomplishments, during the stage of unconscious processing we relax from actively pursuing the problem at hand. In inner creativity of self-realization, we become quiet, silent; we want to kill the accomplisher. We surrender to the flow of life rather than trying to push the river.

Moudgalyana came to Buddha with many questions that he had asked of all the teachers he had encountered. But Buddha saw that the striving student was ready for the next stage. Asked he, "Do you want to know the answers or know the questions?" Moudgalyana was startled. He did not know what to say. Buddha elaborated, "All worthwhile answers have to grow inside you [from your burning questions]. What I say is irrelevant. So stay with me in silence for a year. After the year, if you still want to ask, I will answer." Moudgalyana went into silence. After the year, when Buddha asked him if he had any questions, he remained silent. He had understood the importance of silence in the unconscious processing for self-realization.

Supplementing the unconscious processing with conscious striving to exercise the will is often advantageous. Concentration meditation helps to assert the will, to remind yourself your goal. You may sit in concentration mentally reciting a chant. You may stand with both your arms raised horizontally (the posture of cross of the gold) for an hour a day or whirl like the dervishes to increase the power of your will.

How hard do you have to practice? It depends. Some people are so entrenched in their egos that the heat of much hard practice is needed for them to jump out of their trenches. Others find it easy. In a Zen story, a spiritual seeker meets an extraordinary spiritual family in which all members have awakened to their Buddha nature. In answer to the seeker's question, "Is it difficult to awaken to our true nature?" the father says, "It is very, very difficult." But the mother says, "It's the easiest thing in the world." The son says, "Neither." Finally the daughter says, "If you make it difficult, it is. If you don't, it's not."

THE ENCOUNTER IN THE INNER
CREATIVITY OF SELF-REALIZATION

As with outer creativity and inner creativity of accomplishments, inner creativity of self-realization also involves an encounter between our ego and quantum modalities. The existentialist philosopher Martin Buber has called this the I-thou encounter; the encounter is even more intense than in the creativity in the service of accomplishments because your purpose is the transformation of your self-identity, a radical change in the familiar homeostasis of your adult ego. Radical change requires a radical intensity.

A young man did not understand how it was possible to concentrate on a mantra even for a few minutes. So his teacher, who happened to be the king, ordered the young man to carry a vessel full of oil three times around the palace. "And while you carry the oil," cautioned the king, "be careful that not a single drop falls to the ground. A swordsman will follow you, and he will instantly cut off your head if any of the oil spills." While carrying out the command, the young man easily understood the intensity that is involved in successful concentration.

The physician/spiritual teacher Richard Moss (1981) recognizes impending surgery as fostering the meditative intensity that I am talking about. The healing path is a great one for self-realization.

When the mystic/psychologist Richard Alpert worked on a prison Ashram project, he was impressed with the level of awareness of the inmates on death row (Dass, 1977). Hospice workers too find that high levels of intensity become available to people facing death. Such intensity can forge the bedrock commitment that is required for your spiritual quest.

It is not too difficult to build intensity. Many of us know this from such "negative" experiences as brooding on anxiety. What prevents you from looking into your patterns with the intensity that develops from these states? We escape with TV or light reading, or squander our energy on imagined scenarios of triumphs and failures, retaliation and vengeance. Instead, suppose you vigilantly observe whatever comes up as precisely as possible? This was the basis of the teaching of the mystic J. Krishnamurti. Just observe, just look.

Ultimately, we are afraid of intense practice. It's like the hungry chicken and the pig that were traveling together. They saw a diner with a sign advertising a bacon-and-egg special, and the chicken wanted to stop there. But the pig balked, protesting, "You have to make only a contribution. But for me, that's total commitment." The mystic Ligia Dantes suggests watching our fear and learning to discriminate between fear as a natural

survival instinct and fear as fantasy to perpetuate the illusions of the ego-identity. When you shed fantasy fear, you can more readily invite intensity into your practice (Dantes, 1990).

“If I give up my ego, what is left of me?” This is the eternal question, formed entirely from our desires, fears, attachments, etc., that makes us shy away from honest self-scrutiny and prevents us from surrendering to the quantum self. Is there life after the shift of your center of being beyond the ego? You have to ask the question with intensity and perseverance, to take a risk with no surety of reward, and to accept the anguish of waiting for the “new life” to spring forth.

BIG INSIGHT

The mystic Franklin Merrell-Wolff practiced the path of wisdom (he was a trained mathematician/philosopher) for years with high intensity. Then two things happened. One day, he came across the wisdom of the Indian mystic Sankara while reading his book *Crest Jewel of Discrimination*. The wisdom was, Atman (quantum self) is Brahman (consciousness – the ground of being). He began to ponder this wisdom for days as if he has found his guru. Then one day, he realized that there is nothing to seek. To his amazement, this realization was followed by an experience of the quantum self (Merrell-Wolff, 1973).

What actually takes place in awareness in this direct encounter with the quantum self? Franklin Merrell-Wolff is quite specific:

The first discernible effect on consciousness was something that I may call a shift in the base of consciousness. [...] I knew myself to be beyond space, time, and causality. [...] Closely associated with the foregoing realization there is a feeling of complete freedom. [...] I did not attempt to stop the activity of the mind, but simply very largely ignored the stream of thought. [...] The result was that I was both here and 'There', with the objective consciousness less acute than normal. (Merrell-Wolff, 1973: 38-40.)

In the moment of spiritual illumination of this kind, primary quantum self awareness floods the field of attention; secondary-awareness processes related to memory and ego continue but are given no attention or importance.

Some people declare that they are “enlightened” as a result of the experience of self-realization. But there is a fallacy here. As Lao Tzu used to say, “the one who knows cannot say, the one who says cannot know.” So here is a genuine difference between inner creativity of archetypal accomplishments and the inner creativity of self-realization. In inner creativity of accomplishments, at the manifestation stage, the ego is the central player. So the subtle ego-boosting that is inherent in regarding

a product as an accomplishment does no harm to the product. The ego identity needs to be strong anyway. But in inner creativity of self-realization, any such inflation of the ego is a detriment to the process and must delay or distort the manifestation of the wisdom of the insight.

The American mystic Richard Alpert (aka, Ram Dass) went public with his “enlightenment” only to realize years later how the declaration had interfered with the manifestation of the transformation of his being. After he corrected his mistake, his flowering resumed.

In other words, humility is a necessary ingredient of the inner journey of the manifestation of the insight of self-realization. Humility is the recognition that a transpersonal consciousness beyond ego, beyond even the quantum self is potentially in charge.

WHAT IS ENLIGHTENMENT?

During the earlier stages of the process of inner creativity leading to self-realization, a moving away from the world, a renunciation, takes place. During manifestation, there is a re-entry into the world, but from no fixed centre of self-identity that has shifted beyond ego. This re-entry problem is alluded to in the Zen saying, “Before awakening [enlightenment], mountains are mountains and lakes are lakes. Then [during the creative process that includes manifestation], mountains are not mountains, lakes are not lakes. After awakening [enlightenment], mountains are mountains, lakes are lakes.”

With the realization of no ego-self, the identity with the ego more and more gives way to the quantum self as we try to manifest that realization in our regular living. The ego now serves more and more as the functional agent of the quantum self. Quantum consciousness/God speaks to the quantum self which communicates to the ego; the ego carries out the choices of the quantum consciousness without interference.

The East Indian mystic Ramakrishna used the analogy of a salt figurine dipped into the ocean to make the same point. The figurine dissolves; its function, the saltiness, remains even though merged with the ocean, but its separate structure and identity no longer exist. This is the goal of the manifestation stage of the creative act of self-realization. The challenge is not to run away from ambiguities that arise or to escape into an action-oriented approach but to remain aware of the movements of consciousness as they manifest reality.

All three great East Indian mystics of recent times, Ramakrishna, Ramana Maharshi, and Sri Aurobindo, spent long years in silence after their ‘aha!’ insight of self-realization. The sixth patriarch of Chan Buddhism,

Hui Neng, was a humble cook for twelve years after his enlightenment before circumstances catapulted him to public life.

As the center of the self shifts beyond ego, the direction of action increasingly comes from the quantum self – primary awareness. At the cremation grounds in India, an attendant stands by the pyre with a stick to see that no part of the body escapes the fire. When the job is done, the attendant throws the stick on the pyre. This is the destination.

SAVIKALPA AND NIRVIKALPA SAMADHI

In self-realization, what one experiences is the oneness of everything, the subject, the object(s), the entire field of awareness, all seem to become one. In the yoga literature (Taimni, 1961), this is called *savikalpa Samadhi* in Sanskrit; *samadhi* means the balance of the two poles of subject and object. *Savikalpa* means with separation. In other words, in this experience, we become aware of the dependent co-arising of the universal quantum self and the world (object) albeit the self (subject) is already split from the world (object). We do not ever experience consciousness undivided from its possibilities. Any experience, by definition, involves collapse of possibility into actuality and subject-object split. In other words, *savikalpa samadhi* is as deep (or high) as we can go in experience. We see clearly that we are the children of God.

Very confusingly to the ordinary mind, the Eastern literature refers to another kind of samadhi called *nirvikalpa* samadhi. The Sanskrit word *nirvikalpa* means without split – without subject-object separation. If there is no experience without subject-object split, what does this represent?

To understand this, consider deep sleep. In deep sleep, there is no subject-object split, and there is no experience. But there is no problem with accepting that we sleep either. We all sleep and it is an accepted state of consciousness.

So *nirvikalpa samadhi* has to be understood as a deeper sleep in which some special unconscious processing takes place that is cognized at the moment of waking much like the experience of a near-death survivor experiencing autoscopic vision and later remembering it upon being revived. This is what the East Indian sage Patanjali meant when he said, “meditate on knowledge that comes during sleep.”

What is the special vision that is revealed upon waking up from *nirvikalpa*? The mystic sage Swami Sivananda (1987) describes it thus:

There are two kinds of [...] nirvikalpa samadhi. In the first the jnani [wise person], by resting in Brahman [Sanskrit word for Godhead], sees [processes] the whole world within himself as a movement of ideas, as a mode of being or a mode of his own existence [...] This is the highest state of realization. [...] In the second variety the world vanishes from view and the jnani rests on pure attributeless Brahman.

Clearly the first kind of nirvikalpa samadhi is the ultimate state of unconscious processing when we as quantum consciousness – God in religious jargon – process the entire world of quantum possibilities including the archetypes. It is not an experience but a state of consciousness.

Sivananda's second kind of nirvikalpa state is called *Turiya* in the Vedanta literature. Turiya is a deeper nirvikalpa state of non-experience. Can there be a (unconscious) state of consciousness deeper than the unconscious processor of quantum possibilities of the whole universe? What was before that? Consciousness with all possibilities, no limitation – not even quantum laws – imposed, that's what. When all possibilities are included, there is no quality, and there is nothing to process, a reason Buddhists call this state of consciousness the great Void and Hindus call it *nirguna*, attributeless, without qualifications, and Christians call it Godhead (prior to God).

So what is the point of all this for enlightenment? There is a claim in the spiritual literature of India that people of nirvikalpa capacity are totally transformed, their identity completely shifts to the quantum self except when the ego is needed for everyday chores, for ego-functions.

So what is enlightenment? For savikalpa creatives, the discussion above has shown that the self-realization experience requires an arduous journey, but it is not the end of the road. You have to manifest the quantum self in your living.

Now suppose you have the capacity for nirvikalpa state of type 1 whenever you desire it. If your desires are tuned to that of the creating consciousness, this would be quite natural, wouldn't it? In that case, doesn't it make sense to say that all your doings would be carried out preceded by God's unconscious processing and creative choice guaranteeing appropriateness? And yet, the very fact that one has desires compromises this exalted state of existence, doesn't it?


For the achiever of the nirvikalpa samadhi of the first kind, now unconscious processing includes the processing of supramental possibilities. This means that tuning oneself to the evolutionary movements of consciousness and acting from it appropriately would now be easy without effort. But, there is still “somebody” who

is walking his/her biddings in real time. A vestige of ego-identity remains.

The situation is drastically different for a person once turiya – unconscious processing in the attributeless – is the case. There is no longer any “thing” to manifest, all desires (*vana* in Sanskrit) of manifestation is now burnt away. So this is nirvana, to use the language of Buddha, the state of no desire.

When nirvikalpa Samadhi becomes easy without effort, in a sense it is liberation, because since there is nothing more to be accomplished, there is no need to take rebirth. So if liberation means liberation from birth-death-rebirth cycle, then liberation arrives with nirvana. But if you have the exulted notion that liberation means total freedom, forget it. With embodiment, one cannot be totally free of ego-conditioning, one cannot always be in the quantum self. Hence the wise koan: how does the Zen master go to the bathroom? A Zen master goes to the bathroom the same way as every adult using ego-conditioning. And whenever the ego modality is used, the identity may come back and play out.

So in esoteric Hinduism there is the concept of liberation in the body that then is recognized to have some limitations. Only for liberation with death, there is total freedom.

Science is telling us unambiguously that only people of turiya consciousness are fully transformed in every which way imaginable. Obviously, the great mystics of the world, from reading the folklore around them, seem to qualify for this turiya level of being. But speaking as a scientist, we must reserve our judgment until more data is available. 

REFERENCES

- ANDERSON, S. AND HOPKINS, P. (1991). *The Feminine Face of God* (New York: Bantam).
- DANTES, L. (1990). *The Unmanifest Self* (Boulder Creek, CA: Aslan Publishing).
- DASS, RAM. (1977). *Grist for the Mill* (Santa Cruz, NM: Unity Press).
- GOSWAMI, A. (1993). *The Self-Aware Universe: How Consciousness Creates the Material World* (New York: Tarcher/Putnam).
- (2008a). *God is not Dead* (Charlottesville, VA: Hampton Roads).
- HOFSTADTER, D. R. (1980). *Goedel, Escher, Bach: the Eternal Golden Braid* (New York: Basic).
- MERRELL-WOLL, F. (1973). *Philosophy of Consciousness with out an Object*. (New York: Julian Press).
- SIVANANDA, S. (1987). *Vedanta (Jnana Yoga)* (Rishikesh, India: Divine Life Society).
- TAIMNI, I. K. (1961). *The science of yoga* (Wheaton, Ill.: Theosophical Publishing House).



SPIRITUAL TRANSFORMATIONS

AS THE AWAKENING OF GLOBAL CONSCIOUSNESS:
A DIMENSIONAL SHIFT IN THE TECHNOLOGY OF MIND

A S H O K K . G A N G A D E A N



Ashok K. Gangadean is Margaret Gest Professor of Global Philosophy at Haverford College (Haverford, PA, USA) where he has taught for the past forty-four years. He is also Director of the Margaret Gest Center for Cross-Cultural Study of Religion at Haverford, and has participated in numerous profes-

sional conferences on inter-religious dialogue and East-West comparative philosophy. His primary concern throughout his career has been to clarify the universal logos or common ground at the heart of human reason and rational life.

He is Founder-Director of the Global Dialogue Institute, which seeks to embody the dialogical powers of global reason in all aspects of cultural life and cofounder of the World Commission on Global Consciousness and Spirituality, which brings eminent global visionaries together to facilitate the great planetary awakening.

He is author of several books including Meditative Reason: Toward Universal Grammar, Between Worlds: The Emergence of Global Reason, Meditations of Global First Philosophy: Quest for the Missing Grammar of Logos and The Awakening of the Global Mind.

www.awakeningmind.org; agangade@haverford.edu.

P R E F A C E

ENTERING A GLOBAL PERSPECTIVE ON SPIRITUAL AWAKENINGS

THERE ARE PERIODS IN OUR HUMAN AND cultural evolution in which humanity passes through such fundamental transformations that our reality shifts and new patterns of thought are required to make sense of our unfolding human drama. And when we stand back from our usual more localized perspectives and worldviews and dilate our minds to a more comprehensive global vision very striking patterns come into relief. That we are in the midst of such a profound shift is beyond doubt, and it is of the highest importance to have the appropriate vision, lens, perspective, grammar and technology of mind to adequately conceptualize, articulate and narrate the nature of this transformation.

I wish to suggest that the profound transformation we are now witnessing has been emerging on a global

scale over millennia and has matured to a tipping point and rate of acceleration that has been and will continue to radically alter our human condition in every aspect. So it is of the highest importance that we expand our perspective and call forth unprecedented narrative powers to adequately name, diagnose and articulate this shift.

There are a growing number of frontier voices that in recent decades have emerged in announcing, pronouncing, languaging, conceptualizing and narrating this planetary shift in our evolution. My own journey over the past four decades has converged at the same frontier and in these brief and summary remarks I shall try to focus on what, for me, is the most fundamental challenge in processing the evolutionary shift that changes everything.

If we can stand back and enter a more expansive global perspective we readily find diverse visionary voices on a global scale throughout our evolution who are speaking from a deeper dimension of literacy and intelligence – a missing integral logic and technology of mind – that is the key to adequately processing their insight. In these brief remarks I shall focus on this missing link that is, so to speak, an “access code” to the “enchanted” universe and to the remarkable global consensus that reality is an integral and holistic unified field of information and dynamic connectivity.

This deeper integral logic of consciousness involves nothing less than a dimensional shift in rationality and discourse that calls for a radical revision in our world making, including of course our understanding of culture, knowledge and the essence of scientific minding itself. It is in this dimensional shift in rationality together with its deeper disclosure of Reality that the expanded and evolved space of integral science emerges. In my brief summary remarks I shall sketch the philosophical, rational and ontological foundations this dimensional shift.

P R O L O G U E

A GLOBAL RENAISSANCE IN SPIRITUALIZED RATIONALITY, SCIENCE, RELIGION AND CULTURE

As we enter the 21st century it is unmistakably clear that we are in the midst of a profound and unprecedented

shift in the human condition – a global renaissance that affects every aspect of our cultural lives, our self understanding and, of course, our rational enterprise. This evolutionary transformation, when seen through the global lens, has been emerging through the ages on a global scale. In this brief reflection I shall suggest that the dimensional shift we are speaking of is of an order of magnitude that is so profound that the very concept of a person, of what it means to be human, of our encounter with Reality, of the nature of rationality and all our hermeneutical arts, including the nature of science... are likewise taken to a higher dimension. I wish to suggest that this global context along with this evolutionary shift in the rational enterprise is the appropriate context to situate the diverse pioneering voices calling for a great awakening of humanity through the ages.

In this global perspective we see the macro pattern of the most gifted minds seeking in one way or another to discern, name, formulate and narrative that which is First, an inescapable primal Reality, Force, Energy, Being, Principle, Arche... that conditions and makes all existence, experience, worlds... living realities possible. There is a clear global consensus on this, and if we pause to scan the spectrum of great teachers and teachings across the planet – Lao Tzu, Buddha, Krishna, Moses, Jesus, Socrates, Plato... to mention a few – it is already apparent that the heart of their teaching flows from a profound recognition of such a Primal First all-encompassing forcefield.

Although the Primal Reality is named differently in the relatively localized grammars and textual traditions – *Tao, Aum, Brahman, Sunyata, Yahweh, Christ, Allah, Logos...* – it is immediately apparent that they all purport to name a Primal Source that must be boundless, Infinite, and all-encompassing. And although I will not, cannot, develop this foundational point in this brief summary reflection, it is all-important to recognize that the Logic and Ontology of this Infinite First immediately implies that It must be One and the Same - there cannot be more than one Infinite First. However, although our greatest teachers have seen and known that the Primal First Infinite Source must be one and the same, there has not emerged a truly Global or Universal Grammar and Techno-Logic that formulates and brings out this global truth. Nor has it been clear that this Primal Source of all worlds and cultures implies an Integral Unified Field of Reality that is the foundation and source of all possible worldviews and renderings of reality through the ages, including, of course, worldviews that have emerged in the diverse sciences.

Furthermore, this missing and eclipsed Primal Logic is nothing less than the logic of integral reason that

pervades the human condition, although it has been deformed, repressed and most often eclipsed by certain egocentric patterns of minding which, we shall see in a moment, have continued to dominate our discourse through the ages in all areas of our cultural life, including our scientific enterprise. Perhaps a main focal point in this brief reflection on the profound Dimensional Shift that is now accelerating is that the depth and nature of human reason has been deformed by these egocentric patterns. Here we see that the global consensus of our great traditions recognize that we human make our worlds, our living realities, through the conduct of our thinking- how we use our minds- the technology of minding.

And perhaps one of the grandest insights of the ages is that egocentric patterns of mind, which deform our true Rational Nature, has distorted the true Integral and Holistic nature of Reason, and thus deformed our human essence and all of our hermeneutical or interpretive activities. A focal theme here is that our diverse sciences, and scientific method, scientific knowing, has likewise been stunted and deformed by these egocentric patterns of ego-reason. Our reflections here are seeking to correct this very serious mistake, and open the way to the true and authentic ground of coherent rationality and the eclipsed integral and holistic worldview that is objective reality its, the global and universal cosmological field that constitutes the missing Unified Field of the Primal Infinite Source.

Thus, the Deep Ontology of this Global Unified Field is the Holistic Worldview that has been discerned in diverse more localized ways through the ages, and its irrepressible Presence is what is now being manifested in the unprecedented dimensional shift that is in the offing.

In what follows we will briefly sketch this shift from egocentric reason to the present maturation of the Global Grammar of Holistic and Integral Rationality – the logic of the sciences – of advancing scientific method and higher scientific epistemology and ethics. Let's then look a little more closely albeit in a sketchy and summary fashion at the essence of this profound dimensional shift into Global Reason, Integral Science and its Holistic Worldview.

THE KEY TO THE DIMENSIONAL SHIFT TOWARDS GLOBAL REASON

THE TRADITION OF “FIRST PHILOSOPHY” AS PRECURSOR TO GLOBAL INTEGRAL SCIENCE

Our global lens, which is the aperture of Integral Reason and the awakened global mind, and which we now elucidate, makes immediately evident across

diverse alternative narratives of *The First* – this is called the traditions of “First Philosophy” – that the primal logic, onto-logic, of this Infinite Source encodes a profound consensus of Global Wisdom, of Global Truths – valid and vindicated through the ages across widely diverse philosophies, religions, cultural worldviews and hermeneutical disciplines. The diverse classical traditions of “First Philosophy” across the planet which we just alluded to, have all sought to name and articulate the Infinite Primal Source that constitute global rational space.

WE ARE AS WE MIND - THE GLOBAL HERMENEUTICAL AXIOM

The collective global wisdom of this perennial tradition discerns a fundamental global axiom – that we are as we mind, that we humans, through our interpretive activity, co-create our worlds, our living realities. We may call this the “hermeneutical axiom” – meaning that the highest human art is the art of world making, of shaping the ecology of mind wherein we render our worldview and narrative our reality. This global truth – that to be human is to interpret, that our experience is essentially constituted in our interpretive activity, may be distilled as one of the major findings in the evolution of philosophical thought.

Once this is recognized, that every aspect of our human condition is conditioned by how we are using our minds, that we have no access to “reality” apart from our subjective, interpretive practices in the conduct of our mind – it is an easy step to discern that our technology of minding is all important in what appears before us as our living reality. This is the supreme unifying factor is every aspect of our cultural life, in every disciplinary language or field of interpretation. To experience is to interpret, and to interpret is to render all that appears through the lens of our mind, through our mental ecology and through our technology of minding.

THE EMERGENT INTEGRAL SCIENCE: CONSENSUS OF GLOBAL WISDOM

It is in this consensus and convergence of the diverse traditions of “First Philosophy” – the recognition that how we use our minds is all important in shaping our living realities – that we find the early seeds of Integral Global Science. Aristotle, for example, one clear founder of “First Philosophy” in the Greco-European traditions of philosophy and science was quite clear that there is a primal science, grounded in logic/ontology – the science of Reason itself – that conditions every other discipline, every aspect of human experience and cultural life.

And now we see precisely why this primal science of Reason conditions every possible aspect of experience,

hence every discipline, every perspective: it is this very recognition that how we operate in rational space – the space of Logos – conditions and presides in all our experience. And clearly for Aristotle (and of course for his teacher, Plato, whose teacher is Socrates) the primal science of Logos – the formal sciences of Logic and Ontology – structures the space and dynamics of consciousness wherein human experience in all its dimensions becomes possible and accessible.

But this foundational science of Logos, as developed in the twin formal sciences of Logic/Ontology, which was the heart and pulse of First Philosophy, somehow got lost along the way. Logic is the formal science of consciousness that articulates the fundamental laws of thought, the dynamics of rational space; and Ontology is the formal science of Being that is another primal face of rational space. Together Onto-Logic provides the expanded and dilated rational lens of the mind together with the dynamics of minding that frames all aspects of our interpretive activities. And these twin faces of First Science unfold in and through our technology of minding a logistic of mental processing that opens access to the deeper global dimension of language, consciousness, experience and our dialogic encounter with Primal Reality. So let us pause a moment in this depth probe of the heart of the Dimensional Shift in Rationality to focus further on the “technology or logistic of minding”.

TECHNOLOGY OF MINDING AS KEY TO THE DIMENSIONAL SHIFT

In our global narrative across diverse worlds and traditions through the ages perhaps the most remarkable and startling finding in the collective global wisdom is the contrast between egocentric patterns of minding and living, on the one hand, and the more mature holistic, and dialogic patterns of integral minding that comes with awakened reason. The great wisdom traditions that speak from the Primal Forcefield of awakened consciousness concur that when humans become ensnared in what may be called “egocentric” patterns of processing self and world certain chronic existential, rational and hermeneutical pathologies ensue.

It has been recognized and reconfirmed through the ages that egocentric methods of minding separate the thinker from the object of thought, severs from the holistic primal field of reality, and sets in motion a dialectic of deep dualities, divisions, separations, reductions, reification, fragmentation, alienation and a vast range of existential, personal and cultural pathologies. The egocentric mind takes itself to be a self-existent being which tends to be monocentric, that is, to process reality through its localized lens or perspective and

thus breaks the deeper rational circuits of the integral field of Reason and Reality.

By contrast, this collective wisdom in one way or another recognizes and teaches that we humans have a choice in our technology of minding, and we can choose to move beyond the egocentric stage of minding and living, advancing to a higher dimension of rational and enlightened life through holistic and integral dynamics of minding wherein the thinker and what is through remain in deep interactive and dialogic mutuality. The leading insight of the global wisdom tradition is that the Primal Field of Reality is the space of Integral Reason, the Unified and Unifying Field of Logos wherein everything is dynamically interconnected, interrelated, mutually constituting and co-creatively evolving.

The basic insight is that we have the rational capacity to conduct our consciousness in sync with this dynamically interrelational, eventful universe. It is this very congruence and correspondence between our technology of minding with the dialogic and nondual dynamics of the Field of Reality that constitutes matured and awakened rational coherence and integrity. And the global wisdom tradition recognizes that the main event in our human cultural evolution and development is precisely this shift from the more adolescent egocentric and monocentric patterns of reason to the more mature and healthful integral, hologistic and dialogic technology of minding and living.

For example, the deep insights of the Buddha expressed in the Four Noble (I would suggest Global) Truths focuses on precisely this contrast between egocentric living and the rational awakening to the higher Integral Technology of minding reality. The essence of Buddhist thought is the elaboration of the first Noble Truth that ego minding is existential suffering, in the generic sense of a dis-integral, fractured and fragmented life that lives in artificial or constructed realities. The other side of this essence is the transformation and rehabilitation of habits of mind into the meditative, non-dual, holistic patterns that brings the thinker into integral connectivity with the fundamental relational field of Reality. This awakening of natural reason is seen as the essence of human liberation, freedom, encounter with true Reality, hence scientific knowing and moral being. It is when our hermeneutical practices of self-making and world making flow with the fabric of interconnected Reality that we can know true reality as it is.

In this tradition it was Nagarjuna (150-250 CE), the brilliant Buddhist dialectician, who demonstrated decisively that egocentric “reason” or “logic” that presumes independently (non relational) entities having self-existence is fundamentally incoherent,

unsustainable and self-contradictory. The heart of Buddhist rationality is this recognition that egocentric minding is the source of dysfunctions and pathologies in all directions and cannot be the logistic or technology of natural reason. Nevertheless, cultures and diverse disciplines continue to remain deeply fixated and lodged in such egocentric patterns of minding.

Similarly the heart of Hindu First Philosophy as reflected through the ancient Vedic teachings and performed in the deep dialogue of the Bhagavadgita, one of the pillars of the core Vedantic teaching, makes the same fundamental critique of egocentric minding, reason and logic. The rationality of Vedantic First Philosophy, as developed from Sankara (7th century, AD) through Aurobindo (20th century) likewise focused on demonstrated that egocentric minding is the primary cause of fragmentation, dis-coherence, incommensurable dualities, self alienation... that ultimately produces existential and rational pathologies on the personal and cultural levels of experience. Here, too, it is clear that egocentric “reason” is pre-critical and pre-rational and is incapable to bringing us into direct encounter with objective reality and truth. By contrast this tradition teaches that the meditative awakening of consciousness brings us to an integral yoga of the mind, to integral intelligence and reason which is nondualistic and hologistic in nature.

Of course this fundamental critique of egocentric “rationality” is played out at various highpoints in the evolution of Greco-European traditions of First Philosophy as well. We see early beginning of this Logos tradition in the narratives of Parmenides, Heraclitus, Socrates and Plato. And the move to the frontier of the fundamental Primal Field is clearly reached in the inquiries of Aristotle, and plays out brilliant in Descartes’ “Meditations on First Philosophy”. I should mention that through the global lens we find a very different Descartes than the one found by those interpreters who are lodged in egocentric “reason” with its dualistic and fragmenting epistemology, logic and ontology.

In our reading, Descartes was, indeed, awakening his meditative intelligence in pressing to the foundations of knowledge, science through profound first philosophy. He was clearly breaking the egocentric barrier and crossing into the deeper Integral and Non-dual rational space of awakened meditative intelligence. In fact, Descartes, if interpreted in the appropriate logistic of Integral Reason would have (could have) been a crucial turning point in the journey into the deeper foundation of objective science and rationality. This was the essence of his experiment. And in fact, his dimensional shift continued to haunt the European

tradition through the explorations into the foundation of objective science in the radical writings of Husserl and further developed by his eminent disciple Heidegger, whose mature philosophy arrived at this inevitable dimensional shift to meditative rational intelligence.

Instead, Descartes profound dimensional shift in reaching the “I am” has been grotesquely distorted by predominant egocentric readings of his meditations on first philosophy. And, unfortunately, Descartes did not have clarity on the need for the more advanced rational technology of mind to express his vital insights and left himself open to egocentric hermeneutical abuse by falling back into the egocentric rational logistic in expressing his findings. So the fate of Descartes is emblematic and symptomatic of the continued deformation and distortion of Integral Reason and genuine access to the fundamental Field of Reality that is the foundation of all culture and all disciplines. His primary objective was precisely to uncover the deeper foundations of knowledge, reason, ethics, the sciences, and the encounter with objective reality. His lifework stands as a confirmation of our main point- while his meditative journey into first philosophy took him into the primal Unified Field, his reliance on the older egocentric logistic of minding worked against this dimensional shift, making all the more poignant the absence of the universal calculus or grammar of reason that he sought.

And, of course, we can go on in narrating other prime examples of earlier forms of the dimensional shift- the founding of the Judaic Faith (another version of first philosophy) in the struggles of Abraham and Moses, and epitomized in the life and teaching of Jesus. From the perspective of the global lens it is quite clear that the life of Jesus bears witness to the urgency of the dimensional shift to the Unified Field of Logos embodied in the rite of passage of the “new covenant”. It may be said here that Jesus, as Christ, the Logos made Flesh, embodied the dimensional shift to Integral Intelligence that finds communion and awakened moral-rational life in the technology of the Logosphere.

Here, again, from the ontological point of view, the teaching of Jesus may be summed up as revealing that egocentric life, the life of alienation from Logos, is the primal cause and source of existential disorders and hermeneutical malpractice, while the crossing of the new covenant into awakened Integral Consciousness – the light of Reason – is the *telos* of human evolution. That Jesus’ teaching of First Philosophy and the technology of reconciliation with Logos were mis-appropriated in the lower egocentric technology of mind is just another tragic example of rational and hermeneutical malpractice having dire consequences. And so on.

Suffice it to say in this brief sketch that a compelling story may be told through the global lens to document the irrepressible dimensional shift to the fundamental field of Integral Reason on a global scale. At the same time in this global perspective it is also evident that humanity still lacked a truly global narrative, a global grammar and technology of mind, to bring out the mature and generic form of this foundational transformation into the space of Global Reason. In my research and publications over the past three decades I have presented the results of my quest for this missing global grammar and logistic of awakened rationality.

INAUGURATION OF THE GLOBAL GRAMMAR OF LOGOS

I have here introduced some simple notation to mark the all-important distinction and relation between the egocentric technology or minding and the holistic (dialogic, integral) technology of Global Reason that embodies the dimensional shift we are speaking of. In this context I have suggested that the Greek primal word “Logos” be used as a generic “marker”, “place holder” or “variable” for the Primal Infinite Word that has been named and narrated in boundlessly diverse ways through the ages in diverse cultures, disciplines and textual traditions. So Logos is a *holonym* (a new word, not just a “synonym”) for such Primal Names as *Tao, Aum, Brahman, Logos, Christ, Yahweh, Allah, Nature, Spirit, Energy, Cosmos*, etc.

THE FUNDAMENTAL ((NOTATION)) FOR THE LOGOSPHERE

Perhaps most important along with this stipulation of a Global Primal Name *Logos* for all possible worlds is the notation which marks the two fundamental dimensions of consciousness, language, reality, experience, culture and hermeneutical practice: I have found it useful, even essential to mark any item in the dimension of Logos with ((...)) “double bracket” markers to make explicit the crossing into the logistic of Integral Global Reason, and by contrast, to explicitly mark any word, utterance, phenomenon, experience, item situated in the egocentric technology of mind: /.../ “single bracket” markers.

So any word or utterance, “X”, spoken in the global lens, in the Rational space of the ((Logosphere)), is marked with the ((X)) ... as if ((...)) were “quotes” while any word, utterance “X” spoken in the egocentric lens, in the space of/egocentric reason/ or the /Egosphere/ is marked with /X/.

And the all-important dimensional shift we have been focusing on here may be ((symbolically)) rendered as the shift from /ego reason/ to ((global reason)).

Here it may be said that the evolution of culture and consciousness through the ages may be symbolically summed up as the shift from /reason/ to ((Reason)), from /logic/ to ((Logic)) from the /egosphere/ to the ((Logosphere)), and for the purposes of this volume, from /science/ to ((Science)).

THE EVOLUTIONARY DIMENSIONAL SHIFT FROM /CULTURE/ TO ((CULTURE))

Having introduced this fundamental ((notation)) we are in a position in this brief sketch to bring these opening remarks to conclusion. We will not develop here the dialectical details of the dysfunction and pathology inherent in /egocentric reason/. We have suggested that egocentric /reason/ tends to be /monocentric/, always privileging its own subjective and localized “logos” its /worldview/ or /cultural lens/. In this /rational space/ the /thinker/ is existentially and logistically separated from the /content of thought/:

/thinking subject/ vs /object of thought/
/egocentric “I”/ vs /content of experience/
/knower/ vs /known/

In this structurally and logistically dualistic severance our /subjective field of consciousness/ is alienated from the /object of consciousness/

It is this chronic and pernicious divide, together with the fragmenting logistic of egocentric logic that generates the constitutive dualism, fragmentation, objectification and /logocentrism/ that generates not only the rational pathologies but the human and cultural existential pathologies as well. In a real sense we may sum up this broken /rational space/ by saying that this dimension of discourse in pre((rational)) pre((critical)) and pre((scientific)). For /egocentric reason/, in privileging its own prejudiced, localized worldview or cultural lens is not able to cope with the global turn in rationality that brings multiple alternative worlds and perspectives together in ((one rational consciousness)). Put differently, we may say that /egocentric reason/, being /monocentric/ (even when it alleges to subscribe to a /pluralism of worldviews/) has not matured ((rationally)) to the level in which it is able to authentically entertain multiple diverse worldviews and perspectives in one deep-dialogic consciousness. Ant it is in precisely this ((global turn in rationality)) that our ((historic dimensional shift)) to the ((rationality of the global mind)) may be seen.

Again, /egocentric reason/ with its /monocentric technology of mind/ has not yet truly advanced to ((critical thinking)) which is able to engage in legitimate rational transformations between diverse

worldviews- the essence of the global turn in ((integral consciousness)). For this reason, /egocentric minding/ is /reductive/, /fundamentalist/, /objectifying/ and privileges its own localized /conceptual framework/. By contrast, the transformation into ((global rationality)) is essentially ((inter-perspectival)) in its rational capacity and enters the ((rational common ground of the Logosphere))- the foundation of diverse ((worldviews)) and ((perspectives)). It is in this foundational shift in the ((technology of minding)) in awakening the ((global lens)) that we arrive at the ((Hologistic Unified Field of the Logosphere)).

In this light, the trouble with /egocentric science/ is not its /materialistic worldview/ or its misguided subscription to the dogmas of /ego empiricism/. Rather, and more fundamentally, it is the /egocentric technology of mind - /egocentric reason/ itself, that /reduces/ and /objectifies/ itself, its conceptual structures, its world, its hermeneutical practice- and yields a dis((enchanted)) universe, irrespective of which “official” /worldview/, /cosmology/or /philosophy/ it alleges. And it should be evident that even those approaches which claim to be /holistic/ and /integral/ yet are lodged in the dis((integral)) logistic of /ego minding/ have no true ((access)) to the ((Hologistic Unified Field)). It takes the ((holistic technology of minding)) to access and process the ((Holistic Unified Field of Nature)).

Thus, when the open mind of ((critical reason)) awaken in the ((global lens)) we cross into a high-powered ((hermeneutical)) and ((epistemic)) space wherein the ((thinker)) and ((what is thought)) are immediately mutually constituted in a deep-dialogic and interrelational dynamic:

When our “rational consciousness” advances from the dualistic and divisive space of /egocentric reason/ with its chasm between

/thinking subject/ vs /object of thought/
to the ((global rational and epistemic space)):

((thinker<====>what is thought))

we find the dimension of the ((Logosphere)) in which the ((thinker)) co-arises with the ((object of thought)) or ((content of experience)), in a mutually constituting and co-creative interactivity. It is in this ((epistemic deep dialogic intimacy)) that the ((Knower)) encounters the ((Known)) in all its mutuality and immediacy.

CONCLUDING THEME: DIMENSIONAL SHIFT INTO THE ((ENCHANTED UNIVERSE))

We may conclude this preliminary and sketch reflection by returning to our opening theme – opening a ((space)) and setting a ((context)) in which best

to process, interpret and situate the diverse voices of our evolutionary elders through the ages. For we have been suggesting that the ((Dimensional Shift)) in ((Global Reason)) opens the deeper ((Integral Lens)) of global consciousness across and between worldviews which gives us ((access)) to the ((Logosphere)). We have suggested that the collective ((global wisdom)) of the ages have been witnessing, narrating, presenting the features of the ((Logosphere)) the fundamental ((field)) of ((Objective Reality)).

We have been suggesting that the lower pre((rational)) dimensions of /egocentric reason/ which have continued to dominate our cultures, our hermeneutical life, our scientific practices, our academic disciplines do not have the ((logistical access)) to the ((Unified Field of Objective Reality: the Logosphere)). And in this light of ((global reason)) it becomes more evident precisely how and why this ((Logosphere)) is profoundly sacred and enchanted, why ((consciousness)) pervades ((nature)), why the ((mind-body)) continuum is primal, why ((spacetime)) continuum is a given, why the ((causal continuum)) holds all things in ((dynamic interconnectivity)) hence manifesting the ((nonlocal)) or ((butterfly effect)), and so on.

And here it is remarkable that the collective wisdom of the ages, expressed in – global first philosophy – discloses through the ((global lens)) a Primal ((Logosphere)) of ((Objective Reality)), beyond /objectification/ that fits the ((narrative)) of the ((visions and voices)) of a growing number of frontier thinkers in this fertile interface between science, religion and global spirituality. The ((portrait)) of the ((Enchanted Universe)) presented here is not just the “poetic vision”, “mystical insight” or “intuitive understanding” of various dreamy voices, but, when processed through the ((technology of natural reason)) points the direction for the next evolutionary steps in ((Global Integral Science)) grounded in the ((Holistic Logic of the Logosphere)).

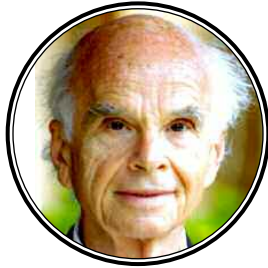




TWO WAYS OF KNOWING THE WORLD:

DISCOVERING THE REALITY OF NON-SENSORY PERCEPTION*

ERVIN LASZLO



Ervin Laszlo is considered the foremost exponent of system philosophy and general evolution theory, and is also noted for his work in futures and management fields. Formerly Professor of Philosophy, System Science, and Future Studies at universities in US, Europe and Far East, Laszlo is the author or co-author of 36 books, and editor of another thirty volumes.

Currently, Ervin Laszlo is Founder and President of the Club of Budapest, Founder and Director of the General Evolution Research Group, advisor to the UNESCO Director General, Science Director of the International Peace University of Berlin, Administrator of the International University of Paris, Fellow of the World Academy of Arts and Science, Member of the International Academy of Philosophy of Science, Senator of the International Medici Academy, Editor of the quarterly World Futures: The Journal of General Evolution, and Series Editor of General Evolution Studies, and other books series in Germany and China.

WHAT IS THE EXPERIENTIAL BASIS OF OUR knowledge of the world? What is the real scope of human perception?

Everyday experience is dominated by the sights, sounds, smells, flavours, and textures of the world around us: information conveyed by our senses. Until recently most scientists maintained it is the only information we receive from the world. The motto of classical empiricism was “everything in the mind was first in the eye.” This reduced human experience to a combination of sensory data. New developments in cutting-edge neuroscience show that the classical concept is obsolete.

Sensory information is known to be processed by neurons connected by synapses in a neuroaxonal network. This network was considered the sole basis of our perception of the world. It turns out, however, that the neuroaxonal network is not the only mechanism that can process information reaching us from the world. There is a vast hierarchy of networks below the level of the neuroaxonal network, extending all the way to

quantum dimensions, and these can likewise process information, albeit in a different mode.

Subneuronal networks in the brain include ensembles of cytoskeletal proteins organized into microtubules. Microtubular networks are connected to each other structurally by protein-links and functionally by gap junctions. Operating in the nanometer range, the number of elements in these subneuronal networks substantially exceeds the number of elements in the neuroaxonal network: there are approximately 10^{18} microtubules in the brain, compared with “merely” 10^{11} neurons.

Neurophysiologist Stuart Hameroff and physicist Roger Penrose suggested that the networks of microtubules process information on the quantum level. They realized, however, that microtubules may be still too coarse-grained for this function: it is more likely that it is the periodic lattice within the network of microtubules that is responsible for quantum-level information processing. This “microtrabecular lattice,” a part of the cytoskeletal lipoprotein membrane, is a web of microfilaments seven to nine nanometer in diameter. Researchers Ede Frecska and Eduardo Luna maintain that this is the structure that responds to quantum-level signals from the environment.

Whatever the networks that decode quantum-level signals, there appear to be two sets of structures in the brain processing information on the world: the macro-level neuroaxonal networks, and the subneuronal quantum-level networks. If so, there are two modes of experiencing the world and not just one: the mode Luna and Frecska call “perceptual-cognitive-symbolic,” and the mode they call “direct-intuitive-nonlocal”. Sense-conveyed information gives rise to the sights, sounds, textures, and odours that dominate our everyday consciousness, whereas quantum-resonance based direct-intuitive-nonlocal perception gives us more subtle effects that often do not reach our conscious awareness.

Perception is a highly selective process. The brain is a collection of nerve cells that function as multi-layered frequency receptors, and these are selective as regards the signals to which they respond. Due to conditioning from early in life, each receptor becomes wired to receive a particular frequency. The act of “tuning

in” to the information coming to us from the world means picking-out the frequency patterns that are familiar from an ocean of patterns and frequencies that is unfamiliar – and thus unrecognized and ignored.

As the receptors tune-in to a particular set of frequencies, a pattern-recognition response is generated: the information-processing networks of the brain interpret the given pattern in accordance with the interpretation established for it. By tuning into the same pattern time and time again, a particular interpretation is reinforced. Our sensory perception of the world is created moment by moment as our brain scans the available frequency bands and produces the interpretations associated with the familiar patterns.

Selectivity based on repeated patterns is typical for all aspects of our experience: we have difficulty in recognizing, even perceiving, unfamiliar patterns. This kind of selectivity operates also in regard to the information processed by subneuronal networks in our brain. Selectivity here concerns the transfer of signals from the quantum-level receiving networks to the cognitive networks responsible for waking consciousness. Signals received through the latter are unfamiliar and disturbing. They are mostly blocked from waking consciousness. But they can surface in non-ordinary states of consciousness.

Quantum-resonance based information shows up in dreams, white-dreams, and day-dreams, in musings and meditations, and in the hypnagogic states that mark the transition between sleep and wakefulness. It also surfaces in so-called altered states of consciousness. Altered states are generated *inter alia* in deep meditation and prayer, in calm introspection, communion with nature, as well as in spiritual exaltation and profound aesthetic

enjoyment. They are also generated by unusual experiences, often of a life-transforming nature. We should consider the intuitions that surface in these experiences not our sixth, but our first sense, for it was available in nature long before humans evolved the capacity to use language and process information in the linear mode of the left cerebral hemisphere.




Entering altered states of consciousness, whether through unusual experiences or through prayer, meditation, aesthetic experiences or the contemplation of nature, mitigate the dominance of the left hemisphere in our perception of the world: they harmonize our two hemispheres. Controlled, repeatable experiments with electroencephalograph (EEG) waves show that in altered states the left and the right hemispheres become synchronized: the patterns that appear in one are matched by the patterns in the other. This contrasts with ordinary states of consciousness, where the two hemispheres function quasi independently of each other. Moreover when people enter deep meditative states together, not only their own left and right hemispheres become coherent: coherence

extends to the entire group. In experiments by Italian brain researcher Nitamo Montecucco, eleven of a group of twelve meditators achieved a level of cross-hemispheric as well as transpersonal synchronization that exceeded 90 percent. Yet the meditators sat with closed eyes, in silence, and did not see, hear, or otherwise perceive each other.

The coherence effect obtains even when people in a state of meditation are at a distance from each other. With increasing distance the level of EEG-wave synchronization falls off, but it remains considerably above random probability.

Experiences in deeply altered states have been reported by scores of psychiatrists and psychotherapists. They include spontaneous contact with persons, things and events the individual could not have experience in the classical sensory mode. Psychiatrists practicing regression therapy find that in these states many patients can access people and events from what appears to be a previous life. The experiences that surface in altered states are distinctly nonlocal. Psi-phenomena occur more frequently in altered than in normal states of consciousness; in such states also telepathic phenomena tends to surface.

Psychiatrist Stanislav Grof found that in altered states people experience a loosening and melting of the boundaries of their individual ego and a sense of merging with other people and other forms of life. In deeply altered states patients report an expansion of consciousness to an extent that seems to encompass all life on the planet.

The classical concept of perception needs to be revised. We are not limited to seeing the world through our five senses. We can transcend the range of sensory experiences by becoming conscious of information received through the quantum-sensitivity of our brain's subneural arrays. In that mode our experience embraces nonlocal elements. Whether these elements remain confined to the subconscious domains of our mind is up to us. In ordinary states these experiences seem strange and disturbing; they do not reach our waking awareness. But when we realize that they are based on bona fide processes in our brain and are not mere imagination we will pay more attention to them. And if we promote this process of "conscientization" by entering an altered state, we can lift our insights and intuitions to the level of our everyday experience. The world we experience becomes enriched with feelings and sensations that lend meaning to life, and situate us in the context of the cosmos. We not only know, but come to *feel* that we are an intrinsic part of the web of life, an intrinsic part of an organically whole universe. 

* This article is based on the author's forthcoming book *New Science for a New World: The Rise of the Akasha Paradigm*, 2013.





GLOBAL CONSCIOUSNESS.

EVIDENCE FOR AN EMERGENT NOOSPHERE

ROGER D. NELSON



Dr Roger Nelson is the founder and director of the Global Consciousness Project (GCP) that he created in 1997. He was Professor of Psychology at Johnson State College in Vermont before joining the Princeton Engineering Anomalies Research (PEAR) team at Princeton University in 1980. He coordinated PEAR's research for 22 years, until his retirement

in 2002. He continues to manage and direct the GCP.

Web: noosphere.princeton.edu, teillard.global-mind.org, and gcp.grama.co; email: rdnelson@princeton.edu.

Now, if the cooperation of some thousands of millions of cells in our brain can produce our consciousness, a true singularity, the idea becomes vastly more plausible that the cooperation of humanity, or some sections of it, may determine what Comte calls a Great Being.

J.B.S. HALDANE

INTRODUCTION

SINCE AUGUST 1998, AN INTERNATIONAL TEAM OF researchers has been working with a globally distributed network of instruments responsive to the influence of intentions and emotions. The resulting evidence is suggestive of a true global consciousness, an emergent collaborative intelligence in which we participate without awareness. This is not a new idea, but the experiment stretches current scientific models and we need to build some bridges to accommodate the data.

Rare individuals hold special places in the minds of huge numbers of people around the world. When they speak we pay attention, and when they suffer tragic deaths we share grief and compassion. If, like John F. Kennedy and Itzhak Rabin, their deaths are doubly tragic and fearsome because they are victims of assassination, the instantaneous shock and consequent synchronous attention of millions is very powerful. Princess Diana's death was also tragic, though an accident, and we were transfixed. She was a much admired figure and the sudden shock of her death was magnified by her stature as a humanitarian in

addition to her captivating presence as a royal, an inspiring woman, and a sometimes beleaguered public figure. Estimates of more than a billion people around the world were rapt in synchronous attention during her funeral.

Occasions like these have in common that huge numbers of people come together in a shared focus and in powerful shared emotions. The question arises whether this might matter other than in our mind's eye – whether it could impact the physical world in some way. Given a body of scientific research such as that in Princeton University's PEAR lab (Jahn, et al., 1997) showing consciousness can affect the behaviour of physical random systems, it is implicit that mass consciousness and emotion would also have a presence in the world. The technology used in the lab should in principle be usable in the field looking at natural manifestations of consciousness interacting with physical systems.

Early in the 1990's, we had built a system that registered continuous sequences of random number data, day after day, 24/7. Thus, in 1995 when Prime Minister Rabin was murdered by a crazed young radical, we were able to look at data collected during the time of the event. Though the tragedy took place half a world away from Princeton geographically, the psychological distance was very small – this was clearly a tragedy with world shaping consequences. I happened to be in Germany when the news was broadcast, but I made notes to enable a formal analysis. The results showed that the data sequence generated in Princeton had a strong and persistent deviation lasting half an hour, peaking just at the time of the assassination.

The next steps toward the eventual Global Consciousness Project (GCP) were actual prototypes. I asked colleagues engaged in consciousness research using RNGs to take data during a web-organized meditation called Gaia-mind in early 1997 (Nelson, 1997), and a few months later during Princess Diana's funeral (Nelson, Boesch, Boller, et al., 1998). We collected data streams from several locations in the US, Europe, and the UK. The merged results were statistically significant, and supported our hypothesis that the "network" of a dozen RNGs would show deviations during the events.

These beginning efforts to study mass consciousness followed decades of laboratory experiments, and years of field work with RNGs collecting data in group situations. It seemed worthwhile to ask whether we might be able to detect faint indications of the “noosphere” envisioned by Teilhard de Chardin as the next stage of our evolution (Teilhard, 1959). It is a provocative question, but one that is in principle amenable to scientific inquiry. Technological advances coupled with increasingly sophisticated experiments on human capacities promise to yield at least tentative answers.

HOW WOULD IT WORK?

Science has only recently engaged such mysteries, developing instruments and measures that give us a rough picture of mind/matter interactions. It turns out that randomness is our ally, for it seems to provide a field in which intention, wishes, and prayer can play. Randomness in a system means that the process is not determined, so its nature as it passes through time can't be predicted. If we build a good RNG, it follows the laws of chance, and each sequential bit is independent and unpredictable. Yet, certain qualities or states of consciousness appear to change the behaviour of such a device subtly but detectably. A true random source is labile, meaning its future is not determined, but a biasing influence can add information and increase its predictability. While we don't understand the communication mechanism, consciousness is evidently a rich source of information potentially available to the labile RNG sequence. Mind/machine interaction studies indicate that random systems are preparations that can absorb informational structure or bias to become detectors for effects of consciousness, not only in the lab but in the broader world.

We are far from having devised a mind meter, of course. The information linkage from mind to machine is faint and not very reliable. This is probably because we don't know enough yet to create really good experiments. Though we understand the principles of our random devices, mind is far more complex and adds many variables to the equation. We try to ask simple questions in research with our RNG technology, but we have learned that when dealing with human consciousness there are endless degrees of reflection and refraction in the answers. Our best tools are therefore those which summarize and integrate information over many repetitions of each question. We ask whether apparent departures from random behaviour during major events are just chance fluctuations, or if the deviations are correlated with the questions in which we are

interested – if they correspond to mass consciousness. If replicated observations indicate a real departure from expectation and not just chance variation, we take it as evidence that consciousness has touched the system and left a mark in the statistics.

THE PROJECT

Laboratory RNG experiments have been conducted over several decades by dozens of researchers, and they provide evidence for an interaction of mind and matter (Jahn et al., 1987; 1997; Radin and Nelson, 1989; 2003). A smaller corpus of field experiments show that group consciousness also can affect the behaviour of RNGs. (Nelson, et al., 1996; 1998; Bierman, 1996; Radin, et al., 1996; Nelson and Radin, 2003). But the next step is a big one. How do we make the leap from local experiments in laboratories and small groups to a world-spanning network testing for signs of a global consciousness? This requires an unambiguous non-locality that extends the lab and field paradigms into little-tested realms. How could there be any effect of a world-wide New Year's celebration, or the beginning of a war, or a billion people watching a funeral ceremony, on RNG devices placed in far corners of the world?

Attempting an answer to that question may be premature, but it lays out the basics of the Global Consciousness Project, which is an international research collaboration of more than 100 people around the world. We use the same RNG technology developed to study effects of conscious intention in laboratory research and exploited also to look for effects of group consciousness. The GCP application is designed to register similar effects of consciousness on a global scale. We record continuous parallel data sequences from calibrated physical random sources located in a wide geographic distribution. Our focus is on correlations of data deviations with special states of an operationally defined “global consciousness”. The idea is that when great events engage the attention and emotions of large numbers of humans, there will be an interaction of our communal consciousness and the physical world resulting in detectable anomalies in the data. According to standard physical theory, there should be no structure at all in these random data. Yet, we find that many global events are associated with non-random deviations.

We maintain a network of RNGs located around the world in 65 host sites, from Alaska to New Zealand. Figure 1 shows the network, which is a live Google map on the GCP website, providing detailed information about the host sites including location, equipment, history,

and who is responsible for each of the nodes. These devices send data for archiving and later analysis to a dedicated server in Princeton, New Jersey.

Our analyses establish that the non-random behaviour cannot be attributed to mundane sources such as electrical grid stresses, mobile phone activity, or

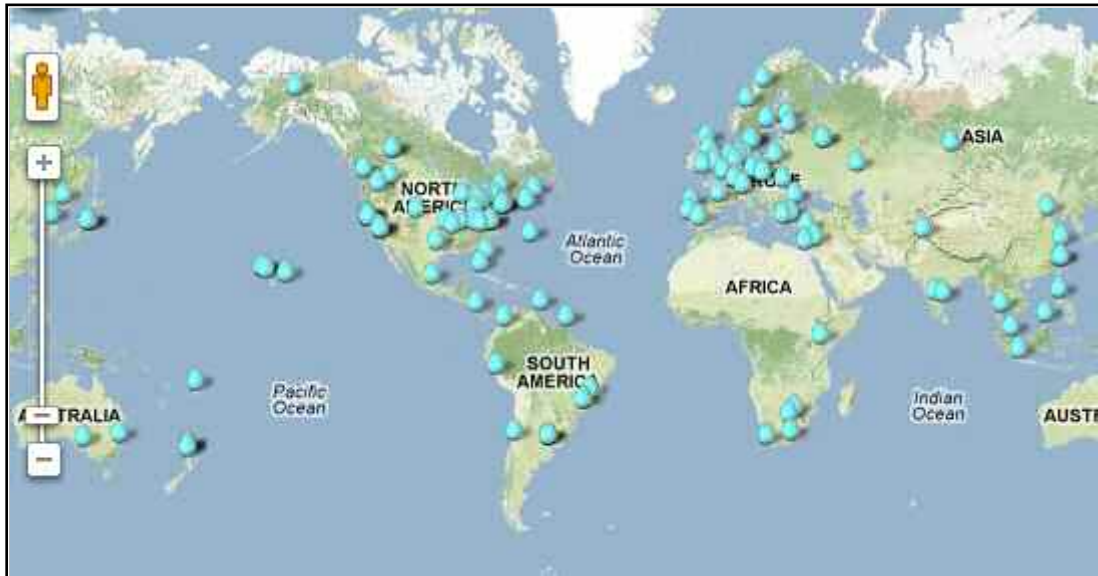


FIG. 1 ~ GCP sites are located around the world, from Alaska to Fiji, on nearly all continents and in most time zones. More than 100 have contributed, and there are approximately 65 operational nodes in 2012.

We collect data at the rate of one trial (a sum of 200 random bits) per second at each node, day and night, month after month, generating a history of parallel synchronized readings from all over the globe. We thus have random data corresponding to every moment, and naturally covering every momentous occurrence on the world stage from August 1998 to the present time. These data are the same kind as used in the laboratory and field experiments showing what appear to be non-local correlations with human intentions and emotions. Our central archive is thus a continuous history of nominally random data that might show detectable structure when a major event stimulates an unusual coherence of thought and emotion focused anywhere in the world.

The experimental protocol is simple: We register an *a priori* hypothesis specifying the beginning and end of each event and the statistical procedure that will be applied to test for a departure from random behaviour in the corresponding data. This is a classic and rigorous replication paradigm. The results include both hits and misses, and the average effects are small, but they add up to a statistically reliable confirmation of the predicted correlation.

electromagnetic fields. The evidence suggests instead that the anomalous structure we see is related to periods of coherent focus of human attention generated by extraordinary events. For detailed information, see the GCP website at <http://noosphere.princeton.edu>.

EXAMPLES OF STRUCTURE

TERROR

Many cases of violent disruptions of the social fabric have been assessed, and most, though not all of them show the predicted effects. The clearest of these cases was the terrorist attack of September 11, 2001, where we see extraordinary departures of the data from expectation. The formal test specified a period of a little more than four hours, and it did yield a significant result ($Z = 1.873$ and $p = 0.031$). However, this limited view did not reflect the full impact of the 9/11 attacks and the worldwide reactions to them. In *post hoc* analyses, we took a broader perspective in order to learn as much as possible about the effects a powerful event might have on the network. Simply put, we found that the deviations in a number of measures matched the intensity of this event which, without question, affected our global consciousness profoundly (Nelson, 2002; Nelson, Radin, Shoup, & Bancel, 2002; Radin, 2002).

The measure used in most formal tests is called network variance, which is calculated for each second

as the squared Stouffer (average) Z across the RNGs. It was significantly large relative to expectation during the pre-specified formal event, but the *post hoc* analysis showed the deviation continuing for more than two days following the attacks. The persistence and strength of this response is extraordinary, unmatched in the data collected up to that time.

Another measure looks at the variance among the devices and reflects strong positive or negative departures from expectation. FIGURE 2 displays this statistic over three days, in a format that emphasizes the extreme deviations on September 11 and makes clear that this terrible day was different – unmatched elsewhere in the data. We don't have a definitive explanation for it, but the timing also suggests a precursor response, with big changes in the statistics beginning some hours before the first plane hit.

show an overall positive trend matching our prediction.

An event that attracted a great deal of media attention and was followed with positive regard by people everywhere was the week-long pilgrimage in March 2000 of Pope John to the Middle East, to sites that are regarded as the sacred locus of origin for three of the world's major religions. The data showed a persistent trend over the six-day period that was statistically significant. We sadly note that the hope and good feeling surrounding the pilgrimage did not progress to a resolution of differences in the subsequent years. But a liberal and optimistic interpretation of the GCP network response is that our hopes can have a subtle impact in the world.

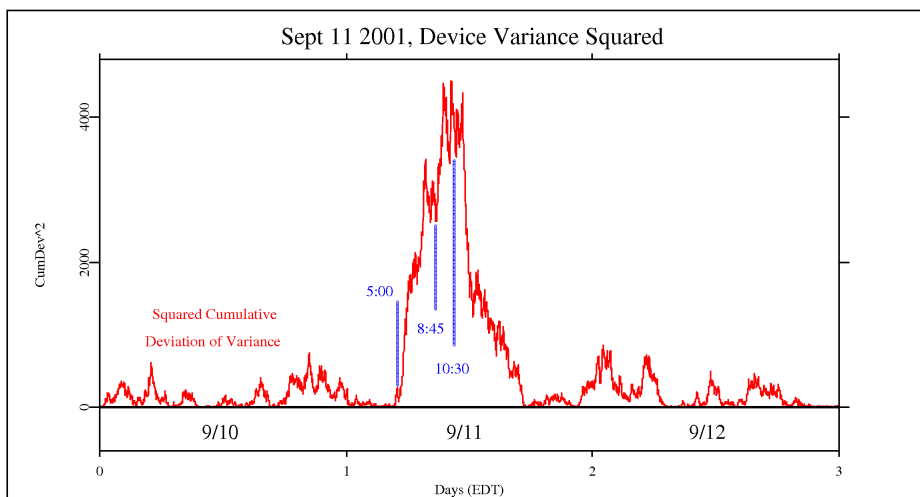


FIG. 2 ~ September 11, 2001. Squared device variance across RNGs. A long period of high variance begins early in the morning, then reverses around 11:00 and stays low for several hours. The preceding and following days show normal fluctuation.

RELIGION AND RITUAL

The intuition that there is a deep sharing of emotion during big events on the world stage leads to asking what states of consciousness might have manifestations in our data and under what range of circumstances. Every few years there is a huge pilgrimage called the Kumbh Mela in northern India. Millions of people gather for ritual bathing in the Ganges. We have been able to take data for two of these events, and in both cases the results show strong deviations in the predicted direction. Similarly, we have looked several times at the pilgrimage (*hadj*) to Mecca, and though the results are variable, they

COMPASSIONATE DEMONSTRATION

In early 2003, concern about a possible war in Iraq was at the forefront of world news, and a focal issue for so many in the US and around the world that it seemed likely to provide opportunities to test for the presence of our hypothetical global consciousness. There were a number of major demonstrations in the US and in other countries. On the 15th of February, enormous numbers (literally millions) of people in the great cities of the world came together in demonstrations aimed to show worldwide support for peaceful resolution of the conflicts in Iraq and elsewhere in the Middle East. The GCP network seemed to respond. The data shown in the following figure are clearly

random for the first few hours of the GMT day, but around 11:00, when people were assembling for major demonstrations in Berlin, Rome, New York, and London, the composite measure departed from expectation with a steep trend that continued for the rest of the day.

intensity in the west. One of the first items entered in the GCP Hypothesis Registry was a prediction of non-random patterns in the data to be collected during the midnight transition from 1998 to 1999. New Year celebrations are a time of shared thought and feeling. People feel relaxed and easy

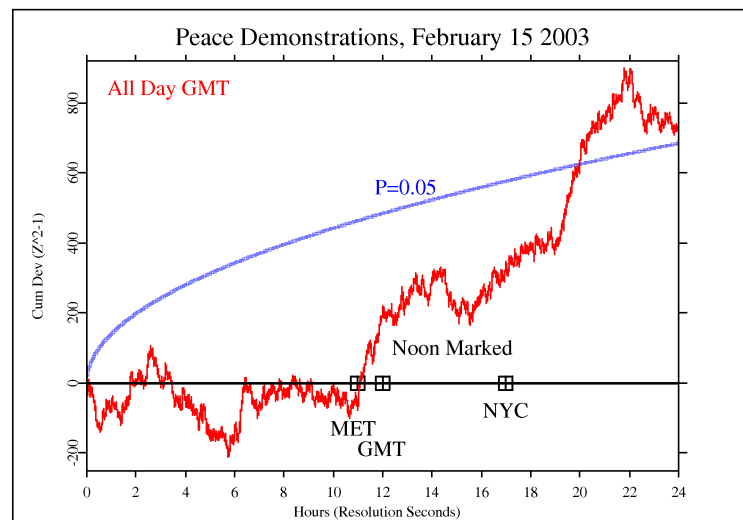


FIG. 3 ~ Gathering great numbers to show opposition to the Iraq war, and support for peaceful solutions to political crises in the Middle East. A strong trend in the cumulative deviation begins at midday, corresponding to the timing of the major demonstrations.

Of course the deviation could be just a chance variation, but the timing and the strength of the trend are noteworthy. In the context of similar outcomes for other major events with global social impact, for example, the International Day of Peace celebrated each year since 1982, it seems justifiable to interpret the correlation at least tentatively as an effect of many millions of people expressly sharing their concern and compassion. On the other hand, although there may be evidence of a subtle effect on the sensitive RNG network, the forces of politics and economics driving world events remain far more powerful. Nevertheless, it is fair to say that these results support the intuition people have had from the beginning of culture that prayer and intention matter, that they can affect what happens in the world.

CELEBRATIONS

Perhaps the most obvious global event for which widespread engagement can be predicted ahead of time is the celebration at New Years, in which there always is great interest and participation practically everywhere in the world, albeit with special

in groups whose focus is on friendship and on an optimistic vision of the future. We proposed to look for changes around midnight in each time zone using epoch averaging across all the time zones to compute statistics.

We predict each year that the variance among the RNGs will decrease as midnight approaches and after midnight will return to normal. While there are some years with unimpressive results, the composite outcome is persuasive. Figure 4 shows the average over 10 years and all time zones, and the data clearly aren't random; instead, they show a pattern conforming to our prediction. There is a decrease in variance centered on midnight that is visually compelling and statistically significant. Permutation analysis yields an estimated $p = 0.027$ that chance fluctuation accounts for the depth and proximity to midnight of the variance drop. The fact that this structure is linked with a physically abstract but socially immanent transition through a moment in time is worth noting. I think this distinction makes it especially clear that the effects in GCP data are associated with consciousness on a global scale, as it focuses and gathers into a coherent form. What we are doing on New Years Eve may not be "important" but we certainly are doing it together.

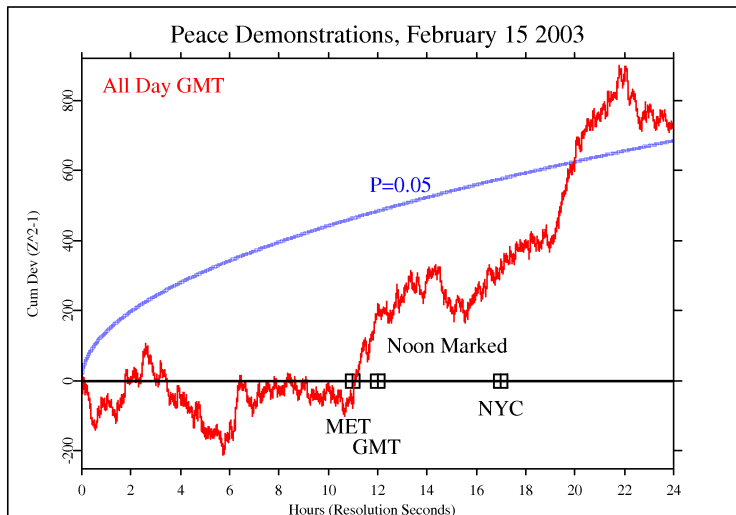


FIG. 4 - Changes in RNG device variance during the New Year transition. The midnight epochs in 37 time zones are signal averaged for each year and then across years. The figure shows the composite of 10 New Years beginning in 1998.

THE BOTTOM LINE

Over the history of the GCP, we have identified two or three major events every month, suited for testing the notion that we may be able to detect the presence of a shared field of consciousness via effects in our data. Some results are as striking as the pictures of New Year celebrations or 9/11, while many show no suggestion of departures from expectation. During this period, we have made over 400 formal predictions from which it is possible to generate a bottom line assessment of the project's basic hypothesis.

The grand, composite result, shown graphically in FIGURE 5, represents the repeated confirmation of our general hypothesis in rigorous replications. This clearly isn't just a chance fluctuation. The graph shows the cumulative departure from chance in 401 tests of the hypothesis that major global events will correlate with structure in data that should be truly random. It summarizes more than 14 years of experience with the GCP network responding slightly but with statistical reliability during events of importance to people around the world. The odds that such a large accumulated departure

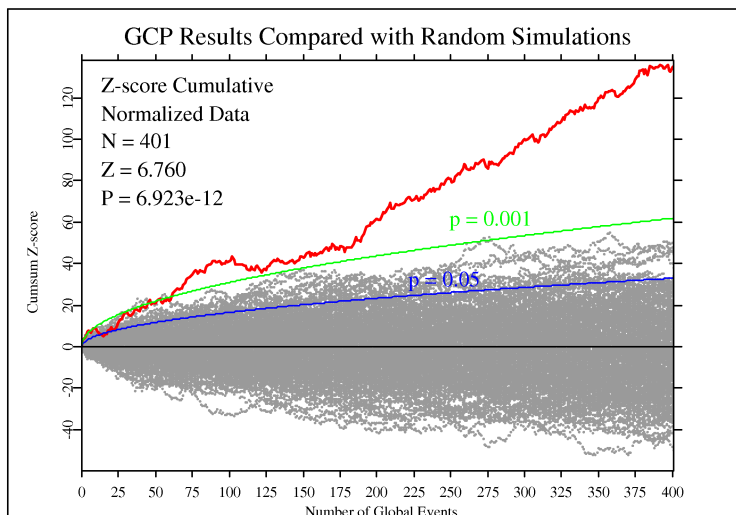


FIG. 5 - Cumulative total deviation of results for 401 formal hypothesis tests compared with a distribution of 250 random simulations. The dotted smooth curves show the 5% and 0.1% significance criteria.

from a random relationship would occur by chance are less than one in a hundred billion.

We might be able to ignore the data from a few cases, or argue that if we look long enough we must find an occasional remarkable pattern in random fields, but structure appears in the GCP data more often than it should, and it does so in meaningful correlation with global events. Though we have more work to do, it is clear that these correlations are material from which we can derive insights into the far-reaching capabilities of consciousness.

FIGURE 5 also includes a cloud of random simulations from the expected null distribution. This represents what is expected for truly random data collected in the same way as the formal events. The procedure reproduces the sequence of Z-scores for 401 events drawn from the (0, 1) normal distribution, providing a background against which the real data can be compared. A still more rigorous simulation distribution can be created by resampling the actual data that are not used in the formal events. This produces an essentially similar display and comparison background. In either case, the actual data definitely do not belong to the distribution of random expectation.

A LARGER PERSPECTIVE

In recent years our analytical program has gone beyond the basic proof of principle experiment. The statistical measure for most events corresponds to correlations in the RNG network. Specifically, the squared composite Z-score across all network nodes is essentially equivalent to the average pairwise correlation among the RNGs. Further analysis shows that in addition to this mean shift statistic, an independent correlation appears in a parallel channel that assesses the variance among the RNGs. (Bancel & Nelson, 2008; Nelson & Bancel, 2011). The next question to ask is whether the event data contain further structure beyond these correlation measures. For example, do the correlations depend on the location of RNGs, and does the correlation strength evolve in time as an event unfolds?

To consider spatial structure, we need a more tractable measure than distance from the event. Although we can localize an explosion or an earthquake relative to the network, the locus of New Years or Earth Day is ambiguous. Beyond this, for our purposes the “event” of interest is the response of people all over the world. We do, on the other hand, have precise information on the distance separating RNG pairs, and this provides an indirect but powerful perspective on the effect of distance. In spatially distributed complex systems, correlations among interacting constituents tend to weaken as their separation grows. Thus we

predict that GCP effects will decrease as a function of RNG pair separation, and test it with a linear regression of correlation strength against the distance between RNGs. The prediction is that pairs of RNGs which are closer to each other will contribute more to the average correlation – even if they are far from the location of the physical event. As an analogy, think of bobbing buoys in the ocean: Those separated by small distances will bob together, but those separated by global distances less so because the swells stirred by the event have limited wavelength compared to the dimensions of the earth.

This analysis shows that there is spatial structure. The inter-RNG correlations decrease as the geographic distance between RNGs increases, with a distance scale on the order of 8,000 to 10,000 Km. It is present in both the original correlation of means and to a lesser degree in the orthogonal variance correlation, and the composite across both measures has a significance level approaching 3s. The regressions thus give empirical evidence for spatial structure and indicate that models will need to incorporate distance-dependent correlations in order to adequately describe the event data.

To address temporal structure we recall that the GCP hypothesis proposes that data correlations will correspond to the human response to events, which first grows as an event becomes the focus of global attention, then persists for a time while people attend to it, and finally dissipates as attention wanes. The GCP test cases (events) are likely to include null data before and after the effects because the formally specified periods are typically over-long in order to maximize the likelihood that the full response is included. The expected temporal pattern in event data will thus be periods of inter-RNG correlation during the effect, typically bracketed by random data. If this hypothetical picture is correct, we can devise analyses to characterize the time structure.

For example, given two independent measures – the mean and the variance correlation – which show effects during the events, it follows that both are driven in part by the same source. Assuming a temporal correspondence between the effect and whatever drives it, we expect correlations between the two measures during the actual effect, but not otherwise. Testing this conjecture, we find that the average correlation between the two measures grows to nominal significance over the first 45 minutes to an hour of an event. The correlation has a broad peak of roughly two hours and then diminishes slowly. This pattern of correlated behaviour of our two orthogonal measures of network structure indicates that the effects are not immediate (in terms of the defined event), but take time to build up to detectable levels, after which they persist for a substantial period.

Our ongoing work seeks to establish linkages with other indicators of broadly shared perceptions and emotional states. Although ratings and assignments are necessarily subjective and have intrinsic variability, it is possible to sort the events into categories that represent various questions. For example, we can estimate the numbers of people engaged by the events and sort them into small, medium, and large categories with sufficient reliability to make useful comparisons. Simple t-tests of differences in effect size reveal that large events contribute most of the anomalous effect in the database; the difference between large and small is significant ($p = 0.02$, two-tailed). This accords with most observers' intuitions; it makes sense and acts like comparisons of a similar nature in psychology and sociology. It is perhaps more interesting to look at emotions represented in the events. Doing so, we find that events categorized as having a high level of emotional impact are much more likely to affect the GCP network than those rated as low in their emotional content (two-tailed $p = 0.002$). When we ask about types of emotions, we find that both negative and positive feelings (e.g., fear and love) are associated with effects in the GCP data; neutral events are much less potent. Looking at specific emotions, we find that some stand out. For example, those events that evoke or embody a high level of compassion have a much larger effect size than those with a low rating (two-tailed $p = 0.025$). To summarize the findings in such investigations of the GCP data, it appears that our hypothesized global consciousness responds to events in ways that are recognizable, indeed quite familiar (Nelson, 2008).

There are also more general ways of assessing the data to see if there is any unexpected structure. This has not been thoroughly explored, but some probes show promise. For example, a news intensity measure is correlated with the effect size of the events (Radin, 2002). Retrospective analysis of repeated similar events is also possible, given the permanent archive of continuous data. In 2006 we identified all major earthquakes of magnitude 6 and greater, dividing the 600 quakes found over the time we had been collecting data into those on land where people are affected, and those in the oceans. The quakes that affect humans show significant structure in the corresponding data, while the ocean quakes have no effect on the GCP network (Nelson and Bancel, 2006).

WHAT ARE THE IMPLICATIONS?


Our primary results are based on correlating specially chosen moments, usually drawn from world news headlines, with data recorded at the same time by our network. These sequences tend to be different from what is expected of random data,

leaving only a few possibilities to consider. It may be that the interest and desires of the people involved in the project produce what is called an "experimenter effect" which is registered by the network. But the multiple indicators of structure (two correlations, spatial and temporal parameters), and retrospective findings like the earthquake differentiation are inconsistent with any simple version of an experimenter effect. Convergent evidence indicates that the anomalous deviations are primarily correlated with widespread human attention and emotion.

As for how it might be explained, the best quantitative models for the data are field-like. My personal, informal model sees us immersed in a consciousness field. It is made of vast numbers of individual fields, and is generally quite chaotic because the components are uncoordinated. Now and again, some factor that influences the structure and rhythm of individual fields may be common to many of them, and this can produce something like a resonance or coherence. The ripples in our separate consciousness fields overlap and build upon each other to make a ringing chord of shared, coherent activity. This allusive description goes well beyond the data, of course, but metaphors can help guide our search for understanding.

When we think and feel in concert, there seems to be a new creation for the moment, a larger consciousness that is at once independent of us, its source, and on the other hand dependent for its existence and nature upon us. When our coherence dissipates, the common field weakens and fades away, though there may be a trace of it remaining in the universe, a template to allow it more readily to form. Over time, eons perhaps, such a collective construction should grow stronger and more used to itself, and we should expect it to develop self-reflection, just as in the distant past our forbears gradually adjusted to their own awareness and began to see themselves as observers.

Philosophical speculation aside, what should we take away from the scientific evidence of interconnection? If we are persuaded that the subtle structuring of random data does indicate an effect of human attention and emotion in the physical world, it points to a creative quality of consciousness. One implication is that what we envision is slightly more likely to happen, and this confers on us a responsibility for shaping our future as participants in a conscious evolution. This time at the beginning of a new millennium seems to vast numbers of people to be critical. We have developed new connectivity through high-speed travel and instant communication. We are stimulated by the same news, and we rapidly adopt the same attitudes and

music and fashions widely over the whole world. It should not be surprising that there are signs of a deeper interconnection beyond the physical linkages, in which we participate without knowing it. Jung, Bergson, Teilhard, Russell, and others of like mind have suggested that because humanity is reflective and creative, we can make decisions and take actions that will direct and shape our own evolution. There is little doubt this is true, but we have only begun to sense this power, just in time to take better control of ourselves so that we may accelerate the maturation of a “noosphere” or layer of intelligence for the earth. The integrity of our only possible home is in great danger from our own destructive and careless misunderstanding, and it is time for us to see ourselves growing toward the next stage of humanity. The future of man is reaching toward us, drawing us into an awakening earth mind which can begin healing the wounds of people and planet. 

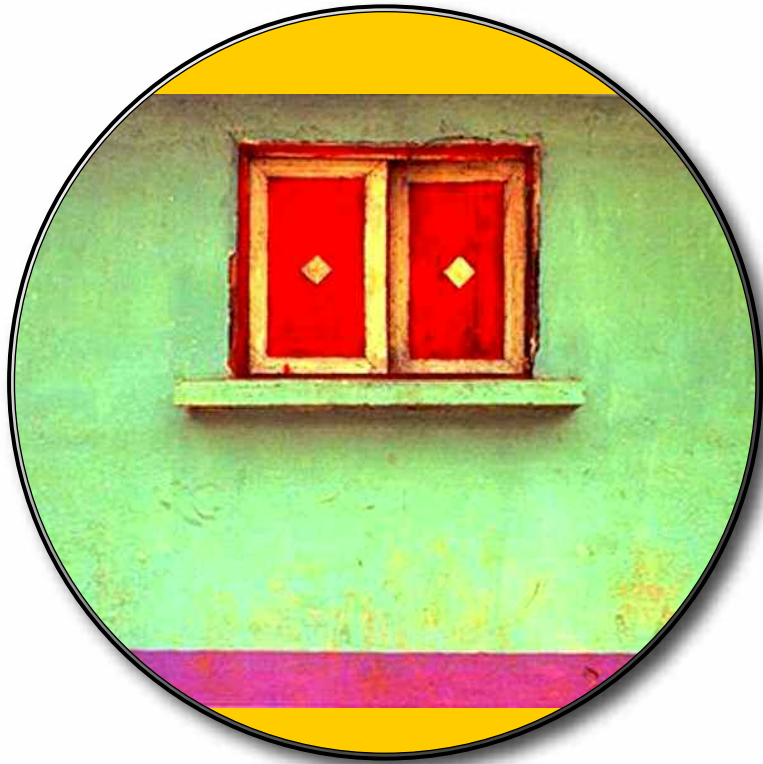
ACKNOWLEDGEMENTS

Greg Nelson and John Walker created the architecture and the data collection software. Paul Bethke ported the software to Windows. Dean Radin, Dick Bierman, and others in the planning group contributed ideas and experience. Rick Berger helped to create a comprehensive Web site. Peter Bancel has been a major contributor to the analytical program. The project exists through the commitment of time, resources, and good will from all the Egg hosts. Our financial support comes from individuals including Charles Overby, Tony Cohen, Reinbilde Nelson, Michael Heany, Alexander Imich, Richard Adams, Richard Wallace, Anna Capasso, Michael Breland, Joseph Giove, J. Z. Knight, Hans Wendt, Jim Warren, Rene Post, and major gifts from an anonymous donor. We also gratefully acknowledge donations via PayPal from many individuals. The Institute of Noetic Sciences provides logistical support as a non-profit home for the project, and the Lifebridge Foundation has provided generous support for documentation of the GCP.

REFERENCES

- BANCEL, P. A. & NELSON, R. D. (2008). “Rigorous Exploration of GCP data: Correlations, Structure, Implications”, *J. Scientific Exploration*, 22 (2), in press.
- BIERMAN, D. J. (1996). “Exploring correlations between local emotional and global emotional events and the behavior of a random number generator”, *J. Scientific Exploration*, 10 (3): 363-374.
- JAHN, R. G., DUNNE, B. J., NELSON, R. D. (1987). “Engineering Anomalies Research”, *J. Scientific Exploration*, 1 (1): 21-50.
- JAHN, R. G., DUNNE, B. J., NELSON, R. D., DOBYNS, Y. H., BRADISH, G. J. (1997). “Correlations of random binary sequences with pre-stated operator intention: A review of a 12-year program”, *J. Scientific Exploration*, 11 (3): 345-368.
- NELSON, R. D. (1997). “Multiple field REG/RNG recordings during a global event”, *The Electronic Journal for Anomalous Phenomena (eJAP)*. Originally published at <http://m0134.fmg.uva.nl/~djb/psi/ejap>, now available at http://noosphere.princeton.edu/ejap/gaia-mind/1997_2.html
- (2002). “Coherent Consciousness and Reduced Randomness: Correlations on September 11, 2001”, *J. Scientific Exploration*, 16 (4): 549-570.
- (2008). Emotions in Global Consciousness. *Proceedings of the 7th Symposium of the Bial Foundation*, Porto, Portugal.
- NELSON, R. D. AND BANCEL, P. A. (2006). “Anomalous Anticipatory Responses in Networked Random Data”, in *Frontiers of Time: Retrocausation – Experiment and Theory*, ed. Daniel P. Sheehan, AIP Conference Proceedings, vol. 863.
- NELSON, R. D., BOESCH, H., BOLLER, E., DOBYNS, Y. H., HOUTKOOPER, J., LETTIERI, A., RADIN, D. I., RUSSEK, L., SCHWARTZ, G., WESCH, J. (1998). “Global Resonance of Consciousness: Princess Diana and Mother Teresa”, *The Electronic Journal for Anomalous Phenomena (eJAP)*. Originally published at <http://m0134.fmg.uva.nl/~djb/psi/ejap>, now at http://noosphere.princeton.edu/ejap/diana/1998_1.html.
- NELSON, R. D., BRADISH, G. J., DOBYNS, Y. H., DUNNE, B. J., JAHN, R. G. (1996). “FieldREG anomalies in group situations”, *J. Scientific Exploration*, 10 (1): 111-141.
- (1998). “FieldREG II: Consciousness Field Effects: Replications and Explorations”, *J. Scientific Exploration*, 12 (3): 425-454.
- NELSON, R. D., & RADIN, D. I. (2003). FieldREG experiments and group consciousness: Extending REG/RNG research to real-world situations. In Jonas, W. & Crawford, C. (Eds.), *Healing, Intention and Energy Medicine* (London: Harcourt Health Sciences).
- NELSON, R. D., RADIN, D. I., SHOUP, R., & BANCEL, P. A. (2002). “Correlations of Continuous Random Data with Major World Events”, *Foundations of Physics Letters*, 15 (6): 537-550.
- NELSON, R. D., & BANCEL, P. A. (2011). “Effects of Mass Consciousness: Changes in Random Data during Global Events”, *Explore: J. Sci Heal*, 7 (6): 373-383.
- RADIN, D. I. (2002). “Exploring Relationships Between Random Physical Events and Mass Human Attention: Asking for Whom the Bell Tolls”, *J. Scientific Exploration*, 16 (4): 533-548.
- RADIN, D. I. & NELSON, R. D. (1989). “Evidence for consciousness-related anomalies in random physical systems”, *Foundations of Physics*, 19 (12): 1499-1514.
- (2003). “Meta-analysis of mind-matter interaction experiments: 1959-2000”, in Jonas, W. & Crawford, C. (eds.), *Healing, Intention and Energy Medicine*. (London: Harcourt Health Sciences).
- TEILHARD DE CHARDIN, P. (1959). *The Phenomenon of Man* (New York: Harper & Row).





INTEGRAL SPIRITUAL PRACTICE:

BECOMING THE ONES WE HAVE BEEN WAITING FOR

TERRY PATTEN



Terry Patten is a leading voice in the emerging fields of integral evolutionary leadership and spirituality. He is the host of the acclaimed online teleseminar series Beyond Awakening: The Future of Spiritual Practice. He is the author, with Ken Wilber, of Integral Life

Practice: A 21st-Century Blueprint for Physical Health, Emotional Balance, Mental Clarity, and Spiritual Awakening. He also created the comprehensive online course, Integral Spiritual Practice: An 8-Session Course To Activate the Full Potential of Your Body, Mind, Spirit, Heart, and Soul. Website: www.terrypatten.com.

IT'S OFTEN SAID THAT WE LIVE IN AN EXTRAORDINARY time of crisis and opportunity. It's a time that's challenging us – as individuals, families, communities, nations, and as a species – in ways we don't fully understand, and to which we're struggling to effectively respond. It's a time of social upheavals, environmental catastrophes, and the rumblings of economic collapse. Yet it's also a time of exponential scientific and technological progress, electrifying popular uprisings, and, for the first time in our history, the advent of a truly planetary culture.

We live in a time, as some have declared, in which humanity is “waking up,” becoming conscious of our unity not only with the beautiful blue orb on which we're blessed to find a habitat and home, but with the cosmos itself – this unfathomably vast, infinitely intelligent, multi-dimensional living Reality that, amazingly enough, *exists*... rather than not. There is “something, rather than nothing.” Yet it's also paradoxically a time, as many acute observers point out, of lethal slumber, of distraction and denial, dysfunction and *dis-ease*, of life lived in the shadow of an “oblivion of Being” – a failure of consciousness that's allowed our greatest material achievements to threaten not only our life on this planet, but our very souls.

To add another twist to the story, many argue that our present crises are simply the result of our evolutionary *success*. Yet most agree that the way forward

must involve a transformation of human consciousness – not merely repeating the patterns of the past.

What is the significance of higher consciousness and development as we face this unprecedented era in our lives and world? How can we become more effective *and* awakened participants in this moment of evolutionary urgency? Clearly, we live in a time that calls for creative, constructive action – and thus engaged, caring people must be willing to get their hands dirty with the hard work of changing the world. But it's equally a time for thoughtful reflection and deeper awareness, and so we must also step back, let go of our surface concerns, and get in touch with a deeper reality beneath the rush of events.

As conscious human beings – committed both to awakening and to the healthy transformation of self and world – how can we reconcile these two apparently contradictory impulses within ourselves: the urge to engage and the call to transcend? How can we “simply be who we already are,” while also “becoming the ones we've been waiting for”?

THE RISE OF INTEGRAL CONSCIOUSNESS

When we contemplate large-scale positive change, often it seems that the real action is in the political arena, or in advanced technology, or perhaps in global business. Yet in all these areas, we most frequently encounter a disappointingly narrow view of life and reality, and what's truly important within it. In these areas, the focus is often merely on exterior results or short-term gains, with little appreciation for the Mystery of Being or the big context of our deep-time evolutionary journey spanning 13.7 billion years since the Big Bang. On the other hand, within spiritual circles that focus on higher consciousness and cosmic awareness, we often find a different kind of limitation of view – one that privileges “being” over “doing,” or spirit over matter, and that can seem detached from accomplishment, excellence, and the urgent and practical issues of 21st-century life.

Yet despite the old apparent opposition between those who focus on results-oriented action and those

who focus on deepening or transforming the awareness that patterns behavior, millions of people are waking up to a *new synthesis* between higher evolutionary consciousness and the pressing issues of our fast-paced civilization (both personal and collective). They are realizing that consciousness itself can play a pivotal role in helping human beings rise to meet the challenges of our time. A new global movement of engaged awakening, a kind of “second renaissance”, is underway, promising a profound synthesis between the realms of body, mind, heart, intimate relationships, civic participation, and spirit.

This movement has many expressions, only a few of which use the term “integral,” but these diverse expressions share a recognition of the inherent wholeness of things, of the whole planet, the whole biosphere, the whole human and non-human family. As the name “integral” implies, this movement is dedicated to *integrating* all the parts ourselves and our world that are otherwise fragmented, disconnected, or repressed. The emerging integral worldview seeks to be as inclusive, balanced, and holistic as possible in considering what is true, good, beautiful, and valuable in our lives. That means bringing together all the best wisdom, knowledge, and inspiration available to us in the information age – from the teachings of the ancient wisdom traditions, to the discoveries of modern science, to the insights of contemporary psychology and neuroscience. Integral consciousness often asks a key question: Drawing on the gifts and truths from all these sources (and many others), what is the most comprehensive, big-picture story or map of our human reality and potential? What if we could see our fast-paced, complex, multifaceted, evolving reality with a whole new level of nuance, clarity, and depth? That’s the exciting synthesis that the emerging integral worldview offers.

From an integral perspective, we see the challenges and opportunities of our time as inseparable from our consciousness and personal development, and as important dimensions of our being that call for our care and conscious participation. In other words, within the space of integral consciousness, we are not only called to “be the change” but also to “do the change” as well. In fact, *being* and *doing* are simply two sides of the same integral coin; our inner work and our outer work are fundamentally intertwined.

The bridge that connects inner and outer, self and world, is *practice*. There is a radical re-visioning of – and re-engagement with – practice underway in our time. My own expression of this, building on Integral Transformative Practice (Murphy & Leonard) and Integral Life Practice (Wilber, Patten, Morelli, A. Leonard) is an approach I call *Integral Spiritual*

Practice. This article celebrates the significance of this larger project of re-visioning practice, referring to it sometimes as “integral spiritual practice” (uncapitalized) and sometimes advocates for some of the unique aspects and ideas present in my particular embodiment (capitalized).

WHAT IS AN “INTEGRAL SPIRITUAL PRACTICE”?

At its simplest, a “spiritual practice” is anything one does regularly and with intention and guidance to experience a higher or deeper spiritual state, or to promote one’s spiritual or holistic development over time. Yet, it’s not only about self-improvement. Sometimes, a spiritual practice is done as an *offering*, less for the sake of the self, and more as a gesture of gratitude or service. Ultimately, it’s both – a healthy, intelligent choice we make for ourselves, and a gesture of gratitude and generosity that we dedicate to something greater than ourselves.

When we live our lives in a way that includes many such practices, and when our practices are held together by a unifying intention and a higher organizing principle, then we are no longer merely doing various spiritual practices, but we can also be said to have a *Practice*. This is big deal! An *Integral Practice*, in this sense, is one that is held by an integral intention and awareness, which means it consciously includes all levels and dimensions of one’s being (including body, mind, spirit, soul, relationships, and so on), and intelligently relates to all aspects of reality of which we are aware.

To “have” an integral spiritual practice means that we are not just doing this or that practice, in a miscellaneous way, but that we’re orienting our life as a whole, at a very deep level, to practice itself. We’re on a whole-being *path* of practice; our life has become an *expression* of practice; our way of being-in-the-world embodies the intelligence of practice. In a real sense, we’ve shifted our identity. We are no longer merely *seeking* awareness, or freedom, happiness, or meaning. We are *practicing* it. In those moments when we are sincerely practicing, we have become a *practitioner*.

If we recognize that life is a school, and that its highest inspiration is transcendental, and that the school of life relates to every dimension of our being – including body, mind, psyche, spirit, and all our relationships – and if we are doing our best to learn the lessons of the school of life, then we are doing an integral spiritual practice. Of course, then we may feel moved to do this as intelligently, efficiently, fruitfully, and truly holistically as possible.

Of course, this is an art, not a science. The *forms* of practice are occasions for engaging the creative *art* of moment-to-moment practice. Sometimes practice requires focus, or surrender, or courage, or discernment, or humility. In each and every moment it will be an authentic creative response to unique conditions. No rigid formula defines practice. But like any art, it needs form, or else the plastic chaos of the world overwhelms us.

THE INTEGRAL IMPULSE

Although an integral spiritual practice, by definition, is a radically open and evolving approach to practice (and can thus be called by any number of different names and still essentially be an expression of the same impulse), a great deal of nuance is implicit within the terms that describe it.

The word “integral” has been variously used to describe a level of psychological development, a stage of socio-cultural evolution, a philosophical framework, an approach, and a worldview. It’s been applied in fields and disciplines as diverse as education, art, sustainability, politics, coaching, business, leadership, and international development (and dozens more). Each of these applications draw on some aspects of what the word “integral” means. Some employ an explicitly integral philosophical framing, such as the categories of Ken Wilber’s “All Quadrants, All Levels” (AQAL) meta-theory. Others rely on the fact that their practitioners are generally operating with integral consciousness as a feature of their own growth and development. Others simply attempt to embody what might be called an “integral impulse,” which means that they attempt, as best they can, to be *integrative* in their approach. For example, an integrative approach to medicine brings together alternative and conventional treatment modalities, attempting to draw on the strengths of each while canceling out their respective weaknesses.

To *integrate* means to bring together, to unite in a greater wholeness. Thus, in a sense, any endeavour that consciously creates a greater whole than the sum of its parts can be considered “integral.” We’re integrating what tends to be dissociated – what our world, mind, and culture construe as separate and in conflict, but which in reality (or as a higher potential) are parts of a greater whole. Yet the word “integral” also suggests *integrity*, which connotes an ethical dimension, the expectation that one is embodying a higher ideal, aligning one’s actions and values, or simply “walking one’s talk.” There is an important sense in which being a practitioner is fundamentally about coming into ever greater integrity (though so long as we’re human, never perfect), such that the more we evolve as integral practitioners, the more trustworthy we become.

Yet “integral spiritual practice” has other meanings as well. As integral spiritual practitioners we are integrating:

- *Our whole self*; including the different spheres of our being and life, such as body, mind, emotions, heart, spirit, relationships, work, and civics.

- *The prior unity of being*; in other words, we are consciously and intentionally opening ourselves in communion with that Ground or Source and as the agency of that Conscious Reality in our everyday lives.

- *Our specific practices*; such as meditation, yoga, service and healthy eating, and the way in which we do them, regularly, with care and attention.

- *All of life as practice*; by bringing the disposition of practice to all our relationships, contexts, and commitments, not just the individual practices that we may do during some part of the day.

- *Feeling and insight*; meaning that we open to deeper and wider feelings, including higher, more refined and ecstatic, but also deeper, more difficult feelings that we might not want to encounter; and we also trust our essential insights and clarities, so that we act in alignment with what we *know* to be true, even in periods when we’re not feeling it.

- *Our evolutionary impulse to serve the world*; meaning that we recognize that self-improvement alone is not a full and adequate expression of an integral practice, but that the world needs us to be willing, creative participants, especially during this critical time of transition to a more sustainable human presence on the planet.

- *Multiple perspectives*; we are flexibly able to take up differing points of view and thus engage specific perspectives, ideas, other people, and the world. We’re not shunning points of view; we’re engaging and recognizing them, without getting lost in them.

- *Awareness itself*; we cultivate the ability to transcend any particular perspective or point of view, and rest in the freedom and stillness at the heart of any moment.

There is one other important way in which integral spiritual practice embodies an integral approach to practice. It brings together the “sudden school” of awakening – which holds that *this* moment is the moment in which to wake up (in fact the *only* moment in which awakening could possibly occur, and that we need only to awaken to the fact that we are *always already* free) – and the “gradual school,” which maintains that awakening is a lifelong process of ongoing liberation, which depends on our doing things consistently, with commitment and dedication, to cultivate and support that liberation.

Of course, both views are correct. As practitioners of the sudden school, we can at any moment “snap out” of fixations of attention that appear to be gripping us. We can “see through” the words, ideas, sensations, or perceptions that are occluding our clear view, and simply recognize them for what they are, while resting in awareness itself. In other words, we do not need to sit in meditation, practice a yoga pose, or eat a special diet to be in direct contact with the beingness of the present moment. The profound truth of the sudden school is that awakening is not something we need to attain; rather, it’s unavoidable. It’s fully present, fully accessible, at any moment that we let go of our fixations with particular aspects of reality, and release into communion with reality itself.

On the other hand, as practitioners of the gradual school, we also recognize that practically speaking, it is our natural tendency or karma to fixate, to contract, and to fall away from the liberated spaciousness of clear awareness, and that it takes intentional effort to regenerate those moments of awakening and make them more frequent. Practice creates the conditions for the “happy accidents” of awakening and revelation. That’s what committing to a regular practice engenders. Thus, there’s a role for the compassionate self-discipline of maintaining an intentional practice, even as we acknowledge the fact that ultimately, we’re always already free and there’s no need to strive for or seek liberation. This also offers a clue to how it is possible to do a practice *without* reinforcing the sense of lack and seeking that have often been the traditional motivations for practice.

BIRTHING A NEW WAY OF BEING

The promise of an integral spiritual practice is that if we sincerely and wholeheartedly engage a life that’s committed to embodying awareness, care, and full presence, and to enacting our own evolution – and the evolution of the whole – then we begin to embody that evolutionary process. This commitment is, without a doubt, at the core of life – it’s the biggest, most important journey we could possibly embrace.

Of course, that’s not easy! That’s why it takes practice. It’s never been easy, but our contemporary world is so complex and fast-changing that we have to approach practice and life with a both/and consciousness, a consciousness that can hold paradox and contemplate it profoundly – not just as a mental puzzle but as an essential profundity – and discover new depth. We must practice holding two or three bottom lines, or more, all at once, so we can be engaging the big picture, the close-up, the in-between, flexibly dancing and

adopting whatever perspective is appropriate in each moment.

That’s the essence of an integral approach, and it requires us to put ourselves on the line – and it’s not a small line! It means taking full responsibility for our part in creating our experience. It means living with authenticity, delving below the surfaces, not leaving anything out, not holding back, going for it, facing what is, finding a commitment and engagement that includes all our parts, and all of us on this planet.. It takes into account all the pieces, yet engages them as one single seamless unity. It thus acknowledges the complexity of our world, yet also stands freely in the simplicity on the other side of complexity.

The integral approach calls us to whole new level of responsibility – one in which we consciously care for and steward ourselves, our loved ones, our communities, our structures and systems – including the planet we live on and life itself. It’s not our ego that is called to greater responsibility, but the wider and deeper aspects of our identity, those parts of us that literally are identified with these wider circles of being. Through our deepening daily practice, we can more finely attune to the currents and updrafts of Being itself, as it gives birth to a new world.

What urgently wants to be born is beyond anything we can predict or control, but the more of its sacred signal our antennas can pick up, the easier it becomes to let Being come through us and as us. We become agents of the ineffable Mystery. We become the here-and-now conduits of a more beautiful world manifesting in and through our lives.

We also become more capable of being effective in the world, because we’re less held back by the parts of ourselves that feel narrower and more conflicted. We can be more fully present and engaged in the moment, whatever is happening. Whether you’re a CEO or project manager or political activist, your practice can make you a more powerful leader. It can make you a more attuned parent or partner, a more intuitive doctor, a more inspiring teacher, a more creative artist, or a better student. The promise of practice is that by going to the heart of the matter in our lives, and unlocking our deepest potentials – including specific capacities for focus, equanimity, and holding multiple perspectives – we liberate our energies to make our highest contribution.

CATALYZING A CONSCIOUS CULTURE

Just as integral spiritual practice brings together our inner and outer worlds, it also unites our individual

and social being. While there are many specific practices we can do on our own, such as meditation, ultimately, we exist (and are practicing) with others. Those others may not be in the same room or even the same part of the world as us (in fact, they may not even be alive in our lifetime!), yet the act of practicing connects us to the collective field of consciousness generated by the broader community of practice.

Being an integral practitioner involves not only intending to evolve oneself, but also participating in the emergence of the broader community – thus co-creating a new kind of culture. Being an integral practitioner means participating in a “meta-sangha” (an inclusive community that creates brotherhood among members of many communities of practice) that includes trans-sectarian practitioners around the world. This meta-sangha has no specific name, official membership, or organizational structure, but we recognize we’re a part of it whenever we meet someone who resonates with a similar depth and breadth of awareness that we feel within ourselves. A mutual recognition occurs at the level of essence, even if we might have little else in common. We realize that we are “on the same wavelength,” attuned to the same collective field.

Co-creating a global culture of practice – a culture of spiritual depth, planetary consciousness, mature intelligence, and ecstatic creativity – is one of the most exciting and rewarding aspects of integral spiritual practice. It’s also a essential part of the transition we are making as a species to a more healthy, sustainable human presence on our planet. Practice is what makes us truly planetary citizens for the first time.

PRACTICING A NEW POSSIBILITY

Ultimately, to be a practitioner is to engage in a grand human experiment with huge potential significance. Can we respond to the crises of our times – and to the inherent challenges of simply being human – in ways that are healthy, intelligent, and sustainable? Instead of acting out of desperation and separateness, can we live and act from an ongoing connection to love, compassion, and prior unity? If we can, then the many problems we face, whether in our personal lives or on a global scale, will be approached as sacred opportunities to awaken, evolve, and serve a greater whole.

The path of practice is not meant to be glamorous. It’s meant to make us more authentically human. One of the core tenets of the Integral Spiritual Practice approach that I teach is that our path need not involve denying our humanity in favour of

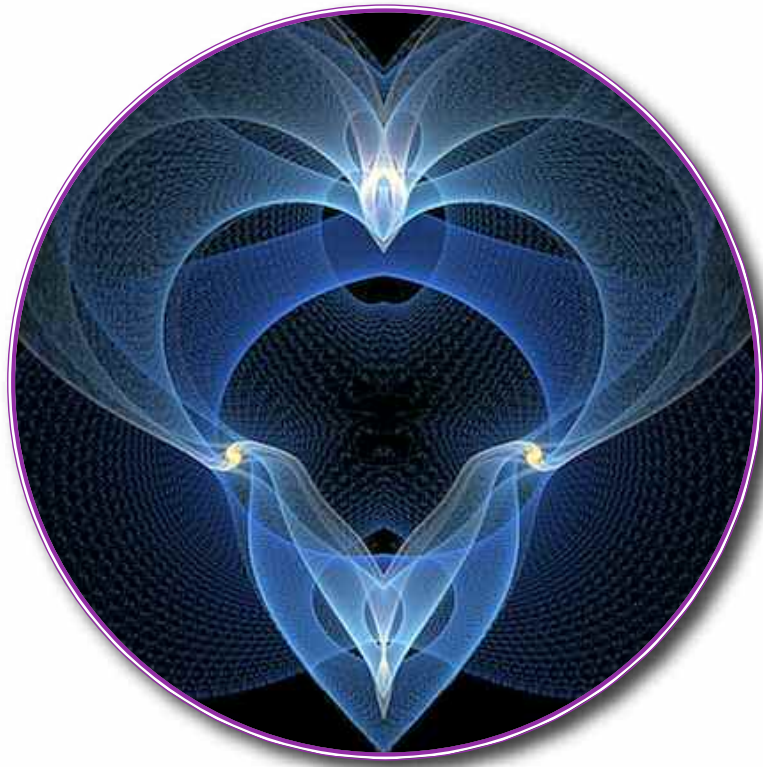
some transcendental ideal or abstract notion of progress. We’re not out to be “more evolved than thou.” As down-to-earth practitioners we can realize that the future of humanity is simply to be more deeply human. That means becoming more honest and vulnerable, making peace with our failures and foibles. It means accepting our quirks – and sometimes our limitations – as we listen ever more deeply and become ever more transparent to the intelligence animating our lives. It means walking a radically unique path, but doing so in good company, and with the benefit of the collective wisdom that we’re co-generating each step of the way.

Yet practice is also an opportunity for greatness. These times definitely call for all our greatness, and an incredible tapestry of different kinds of greatness supporting one another. It’s not grandiose to talk about embracing one’s greatness. It’s a moral obligation to fulfill our highest destiny. There are many kinds of greatness. The world needs each of our unique contributions, our unique service, in very tangible and practical terms. And any opportunity to serve is an opportunity for greatness. Greatness doesn’t always have to be shiny or in the spotlight. Oftentimes it’s humble and supportive. But there are no exceptions; no way out. We’re all in this terrible, beautiful mess together, and it’s going to take as many of us as possible serving the highest within us to take the next step in our collective evolutionary journey.

At the very heart of Integral Spiritual Practice lies a simple yet profound idea. At a certain point we’re called to make a fundamental transition in our lives from being “seekers” of transformation to being authentic *practitioners* of it. In other words, we can think about change, talk about it, argue and debate, and that’s all well and good. But at a certain stage, we must simply *do* it. The question is how? How can we “do the evolution” on a practical, real, genuine, deep, and sustainable daily basis?

Thus, Integral Spiritual Practice is a contribution to an ongoing, universal project of defining and refining the universal integral praxis of embodying a healthy creative response to each and every unique moment of life. It describes, in very tangible, practical, moment-to-moment terms, how we can “become the ones we’ve been waiting for” and it offers a practical path for us to begin doing so now, in every moment, individually and together. ☉





HEART INTELLIGENCE AND EMOTIONAL EVOLUTION

A NEXT STEP IN CONSCIOUSNESS DEVELOPMENT

DANA TOMASINO



Dana Tomasino grew up in White Plains, New York and in Rome, Italy. After attending Marymount International School of Rome and graduating summa cum laude from Williams College in Massachusetts (Highest Honours in Biology), Dana followed her passion to help build a new science of energy through the study of the energetic field interactions that underlie and inform all life. This path took her in 1995 to the Institute of HeartMath in Boulder Creek, California, where she served as a member of the scientific research staff for twelve years. Here she studied and co-authored numerous publications on the psychophysiology of emotions, heart-brain communication, and the role of the heart in perception, emotion, intuition, and energetic communication. Under the guidance of her spiritual mentor, Doc Childre, she also pursued an in-depth period of emotional and spiritual self-study during this time. It was at the beginning of this period that Dana also became cognizant of the shift in consciousness currently occurring on the Planet and the key role of the heart and emotional development in this shift.

Dana is currently Co-Director of Aorangi Moana Sanctuary and the Center for Advanced Research (CFAR) in Northland, New Zealand, where her work continues to seek to integrate science and spirituality, as well as facilitate the practice of heart intelligence and emotional development. Some of her research interests include the energetic information storage and transmission properties of water, intuition, nonlocal agency, and emotional energetic communication between people and across species via the heart's field. Dana's passions are individual and Planetary awakening, a new science that includes Spirit, the Ocean, interacting with free-swimming dolphins and whales, Cetacean consciousness, and music.

The heart, anatomically the midchest area, is at first a metaphorical center of meaning in life and gradually opens into a direct experience of a new dimension.

It is the center for the direct sensing of the energies that represent unconditional love.

RICHARD MOSS, *The I that is We.*

THE NEXT REVOLUTION

IN THE LAST MILLENNIUM THE EVOLUTION OF THE human race on the Planet has witnessed a momentous explosion of development. Largely, this development has concerned itself with ideas and technologies that have revolutionized the

way in which we, as individuals and as a species, interact with the external landscapes of our world. The rapid accumulation of knowledge that characterized the scientific revolution and the advent of groundbreaking new technologies that emerged from the industrial revolution have allowed us to exert more control over our external environment than was ever conceivable before. Now add to these developments the exponentially burgeoning capacity to store, process, and access information that are a product of the current information revolution in which we live, and the bounds of our collective technological potential are difficult to place. To offer perspective, even as few as a hundred years ago – let alone a thousand – it would have been virtually impossible to envision the current reality we have built for ourselves on the foundation of these advances.

Yet we clearly harbor mixed feelings concerning exactly where this dexterous ability to manipulate our outer world has brought us as a species. Notwithstanding the countless benefits offered to society by modern science and medicine; developments in mechanical technologies that lift the burden of onerous manual work; and the information processing power, convenience, and digital interconnectivity furnished by the computing industry, we are left with a haunting sense that something is missing. There is a vast emptiness that remains unfilled by these externally-oriented advances and all that they have brought us. And, with unfortunate irony, even the very ends for which these developments were supposedly created – improved health and healing, enriched quality of life, increased connectedness with one another and our Planet – remain, all too frequently, sadly unfulfilled.

The source of this growing sense of incompleteness is a seemingly fundamental imbalance in the direction in which humanity's evolution has thus far been focused. To illustrate, we may pose the following question: Over the same time that we have built towering cities, transported ourselves around the globe and even into space and back, looked inside the cell and the very subatomic particles that comprise it, and erected networks of super-powerful computers that function at lightning speed – in this *same time*, how much have we done as a species to effect a corresponding development in the world in which we all live in every moment of

our lives – our internal world – the landscape of our emotional experience?

It is an uncomfortable truth to acknowledge that while most of us now take for granted the capacity to control aspects of our outer world with a simple turn of a key or push of a button, human civilization as a whole still lives for a large part at the mercy of unmanaged (and, in our perception, unmanageable) emotional stress; automatic, conditioned judgments and reactions that we accept as “self”; and energy-draining feelings, thoughts and behavioral patterns that are primarily sourced in ego-driven states of fear. Indeed, fear-based patterns of greed, judgment, intolerance, and blame dominate and underlie much of the societal chaos we experience in our world. And at the individual level, “stress,” and the emotional and behavioral responses it engenders, run our lives to a greater degree than most of us are even aware of, leading to diminished quality of life, strained relationships, burnout, physical illness, and, in some cases, even precipitating death.

Certainly, we also experience uplifting feelings that enrich our lives – moments of love, joy, gratitude, compassion, connection and communion with others. But, for society at large, we may ponder how many of these internal feeling experiences remain primarily dependent upon fleeting arrangements of external circumstances outside our full control – just as relief from uncomfortable feelings for many people also appears mainly at the mercy of some change occurring outside themselves. And we must also ask to what degree, as a society, we are *truly conscious* of the subtle, nuanced emotional energy dynamics that govern our perceptions, motivations, and interactions – for it is only in the light of such consciousness that self-willed change is possible. In sum, taking stock of the mass level of emotional awareness and empowerment the human race currently embodies, we find that the large part of the population possesses only a surface-level awareness and understanding of their emotional nature, and only a very limited ability to consciously modulate their emotional world.

Quite ironically, while we are happily driven to continue to invent new and clever technologies to manipulate our external reality, we have collectively come to accept this largely disempowered and unconscious state relative to our internal emotional reality as natural and a “given.” We hardly give it second thought as we move through our lives; it is regarded simply as part of the “human condition.” But what if this so-called “human condition” – our collective emotional landscape and our relationship to it – is not static at all, but marks the locus for the next huge step forward in the evolution of our species? In a relatively short space of time

humanity has lived through the scientific revolution, the industrial revolution, and now the information revolution. But we cannot move forward in a true wholeness sense without a fundamental shift in the focus of our species’ evolution. A new revolution is now in order. This time it will be an internal one. The next revolution is an emotional revolution; and it is already going on.

THE PRIMACY OF EMOTION

The next steps in humanity’s journey of emotional maturation will not be led by the mind. It is the mind (and by this I mean the familiar awareness of our normal, “everyday” mind that thinks, reasons, computes, perceives, assesses, believes, and so forth) that has assumed the driver’s seat thus far in our evolutionary journey. However, it is also the mind – what I call the “reactive mind” – that part of our conscious and subconscious mental process that is governed largely by the ego’s narrow perspective and fear-based patterns of personal and cultural conditioning – that has kept humanity quagmired in the current mass level of consciousness of relative emotional immaturity in which our world lives.

Many of the formal and informal strategies people currently use with the intention to facilitate emotional change attempt to impose the “rationality” of the mind to exert control over the emotions. For example, a common assumption is that if we can just manage to change our thoughts about a situation, our feelings will obediently follow suit. Experience tells us, however, that too often our deeply held emotional feelings and attitudes continue to “run the show” despite our most strenuous mental efforts to think the “right” thoughts. Often this emotional subterfuge occurs at a level beneath our conscious awareness, leaving us at a loss to explain our limited progress despite our best efforts. Furthermore, thinking alone generally does little to penetrate the powerful psychoneurological defense strategies put in place at a very early precognitive stage of our lives to protect us from emotional sensations our body then experienced as overwhelming.

Science on the primacy of emotion validates experience (Zajonc, 1980; LeDoux, 1996) showing us that in fact emotions do not always follow thought; they may emerge independently of cognition and may even stand in conflict with our conscious “rational” thinking: operating at a higher speed than our thoughts, our emotional feelings frequently bypass the mind’s linear reasoning process entirely – a process known as “emotional hijacking” (LeDoux, 1996). Moreover, studies of the neural pathways linking the cognitive

and emotional centers in the brain provide neuroanatomical evidence that emotional signals exert a far more powerful influence on cognitive processes than the other way around (LeDoux, 1994, 1996), explaining why it can be so difficult to “turn off” a powerful emotion, and why “positive thinking” alone may not always have its anticipated impact on our emotional reality.

The mind can help us formulate, organize, and execute our intentions, but it is our emotions that provide the fuel. Indeed, it is the *movement of emotional energy* that underlies significant movement in virtually all aspects of life – in our physiology, in our decisions and behaviour, in our relationships with the people and situations around us. It is this vastly powerful source of energy inherent and largely untapped within us that we must learn now how to consciously direct, modulate, and focus in this next phase of our evolution.

AN INTELLIGENCE BEYOND THE MIND

A fundamental shift in consciousness cannot be initiated by the same force that created the *status quo*. It will require an intelligence and awareness beyond that of the familiar mind – quicker than our linear reasoning and broader than our habitual perception – to chart the deep, uncharted waters of our emotions and produce sustained change in our relationship to our own emotional experience.

I use the term *heart intelligence* to describe a larger source of awareness that we will increasingly integrate and embody as this shift in consciousness progresses. I see this as a source of intuitive insight and understanding accessible to all human beings, which can be drawn on to deepen knowledge of self and others, guide emotional, relational, and spiritual growth, and inform choice and action across all spheres of life.

I acknowledge the challenge at this point of defining heart intelligence completely and concisely, as I believe that collectively as a species we are as yet in the initial stages of unfolding, exploring, developing, and truly understanding this capacity in ourselves. Because I believe that heart intelligence operates at the interface between what we may call our physical-material space-time reality and an energetic field-based domain that science has only begun to characterize, we also encounter the problem of the limitations of our current vocabulary to adequately describe some of the multi-level dynamics and processes involved. Still, my intention here is to outline some descriptive features of this phenomenon, gleaned from my own study, research, and experience, that together

may point us in the direction of an initial acknowledgment and acquaintance with this capacity inherent in all of us.

Some defining characteristics of heart intelligence include the following:

- ~ Transcends the ordinary awareness of the mind but interacts with it
- ~ Serves as a reliable internal guidance system
- ~ Integrates information from and about the body, mind, emotions, and spirit.
- ~ Provides direct insights that are intuitive in nature, which can be experienced in the form of words, images, feeling sensations, and/or a sense of “knowingness”
- ~ Generally provides a more objective, encompassing, loving, and “wholeness-oriented” perspective on situations than we are able to access through cognitive reasoning alone
- ~ Can access and communicate information from a domain beyond the constraints of space-time reality
- ~ Often emerges naturally when the mind, emotions, and physiology are brought into a state of coherent alignment through heart-based emotional self-management practices.
- ~ Can be developed and honed through the consistent application of such practices in daily life.

It is important to note that the function of heart intelligence is not to replace the faculties of the mind, but rather to help align the mind with a larger aspect of ourselves that can both observe and transcend the ego-driven influences that contribute to our emotional unconsciousness. The “reactive mind” then gives way to the *awakened mind*, which, in its clarity, then becomes a receptacle for insight and a powerful executor of inspired action (literally, action that is *imbued with spirit*).

THE ROLE OF THE HEART

AN INTELLIGENT SYSTEM

To explore how heart intelligence can be accessed and developed, we turn first to the heart itself. There is an age-old notion, shared by virtually every major civilization and spiritual tradition throughout human history, of the heart as a locus of emotion, inner wisdom, and insight – a conduit to an intuitive intelligence that transcends and yet also complements the perceptions and understandings of normal awareness (Godwin, 2001; Tomasino, 2011). Many ancient cultures regarded the source of this intelligence as an individual’s spirit or soul, and the heart as a portal to this essential and eternal aspect of our being.

With the advent of modern science and medicine in the West, this broader view of the heart was obscured and largely relegated to metaphor – though it survives still in the colloquial expressions of our language, which tend to connect the heart with the part of ourselves that is most essential, authentic, loving, and even wise. Yet, ironically, new discoveries at the cutting edge of science are now beginning to reaffirm the validity of this ancient conception of the heart – for the first time linking this larger concept of what we may call the “emotional energetic heart” with actual capabilities of the physical heart (McCraty et al., 2009). Far more than just a mechanical pump, the heart is now revealed to be a complex sensory organ and information processing system, with an intrinsic nervous system of over 40,000 neurons whose structural interconnectivity resembles that of the neural networks in the brain (Armour & Ardell, 1994). Indeed, this “heart brain,” as scientists now call it, is known to sense diverse forms of input, process and encode information internally, and make functional decisions *independently* of the brain in the head (Armour & Kember, 2004). There is evidence that the heart’s brain possesses the capacity to learn, and even has a form of memory. Moreover, afferent neurological signals sent from the heart to the brain continuously interact with the brain’s higher cognitive and emotional centres. In this way, input originating in the heart constitutes a major and consistent influence in the very processes underlying perception, cognition, and emotion (McCraty et al., 2009). In sum, it appears that even at the physiological level, the heart not only possesses an innate form of intelligence, but, through its extensive communication with the brain, is intimately involved in the way we perceive, interpret, feel, and respond to the world.

THE INTUITIVE HEART

Perhaps even more intriguing is the recent, growing empirical evidence of the heart’s prime role in nonlocal intuition. Experimental findings in this area, now replicated in different laboratories around the world, consistently show that the heart exhibits an electrophysiological response to a randomly selected *future* stimulus *before* it has occurred. These findings suggest that the heart effectively accesses tacit information about nonlocal objects and events from a domain beyond the constraints of space and time (McCraty, Atkinson, & Bradley, 2004a, b; Bradley, 2011). While its details are beyond the scope of this article, a theory has been proposed that draws on the principles of holographic organization to explain how this type of nonlocal intuitive perception accesses a field of energy in

which information about “future” events is spectrally enfolded (Bradley, 2007; see also Bradley’s article in this issue).

This electrophysiological evidence of the heart’s ability to access information about the future is indeed surprising, if not astounding, when viewed in the light of the usual space/time-based framework in which we relate to and interpret the world. However, the heart’s apparent capacity to act as a conduit for field-based information that typically exists “outside” normal conscious awareness directly recalls the ancient cultures’ shared conception of the heart as a source of intuitive insight and wisdom extending beyond our regular perception. Thus, these scientific data may be seen as providing objective evidence for an innate intuitive intelligence that humankind has known and used for many millennia (McCraty, Atkinson, & Bradley, 2004a).

Venturing briefly beyond the confines of science’s current measurement capability, it is my view that the neurological and electrophysiological indicators of the physical heart’s information processing function and involvement in intuitive perception are reflections, at the physical-material level, of a deeper order that exists at an energetic (nonmaterial, field-based) level of reality. I believe that at the energetic level, the heart is indeed the principal point of connection with the nonmaterial, eternal aspect of ourselves (our unique spirit or soul), whose broad awareness encompasses not only profound self-knowledge but also direct access to a universal field of information outside the bounds of space-time. It is through the heart that we can consciously increase our connectivity and integration with this larger aspect of our being and grow in our ability to draw on its vast awareness.

LOVE

If the heart is a doorway to another dimension of perception and awareness, then Love is the key that unlocks that door. In capitalizing the word “Love” here, I use the term to encompass a range of emotions, feeling states, and attitudes that arise from the heart and are sourced in love, such as gratitude, appreciation, compassion, kindness, and personal love for others – as well as a larger, impersonal Love that transcends the realm of everyday emotion and relation.

Research has revealed that these heart-focused states appear to shift the heart and entire body into a highly synchronized and harmonious mode of function in which awareness is expanded, perception broadened, and emotional stability facilitated (McCraty & Childre, 2004; McCraty et al., 2009). Individuals trained in

heart-based techniques to enhance these states not only exhibit improvements in many objective measures of health, emotion regulation, cognitive function, and well-being (summarized in McCraty, Atkinson, & Tomasino, 2001; McCraty & Childre 2004), but also frequently report a sense of gaining increased access to internal guidance and insight – relative to both their internal emotional dynamics and to situations and challenges in their outer world (Childre & Rozman, 2002, Tomasino, 2011). Typically, the enhanced capacity to draw on this source of intuitive discernment leads to outcomes such as deeper self-awareness, improved emotional balance and mental clarity, more effective decision-making and problem-solving, greater competence in professional practice, and improved quality of relationships. These outcomes suggest that the use of heart-based techniques that enable people to self-activate and sustain feelings such as love, appreciation, compassion, and gratitude may be one practical means of cultivating heart intelligence.

At the psychophysiological level, the practice of intentionally shifting into a feeling state sourced in Love produces a very different internal milieu from that in which we typically spend most of our waking hours. Such a shift produces a profound change in the rhythmic pattern of activity generated by the heart, which immediately becomes more *coherent* – highly ordered and resembling a sine wave (McCraty et al., 2009). With this shift in the heart rhythm, there is a corresponding qualitative change in the information sent from the heart to brain, as well as in the structure of the electromagnetic field emanated by the heart, which is believed to be involved in the reception and transduction of nonlocal intuitive information (Bradley, 2007). Since the heart is the body's most powerful biological oscillator, furthermore, its rhythmic shift to coherence also pulls other biological oscillatory systems into entrainment or synchronization with it – including the respiratory rhythm and the brain's alpha waves – resulting in a *body-wide* state of increased synchronization and harmony in psychophysiological processes (McCraty et al., 2009). At the psychological level, in this state one experiences a distinct quieting of the extraneous inner “noise” generated by the normal stream of unregulated mental and emotional activity and often a fuller sense of well-being. It appears that this movement to increased order and harmony at the mental and emotional as well as the physiological level may open one to a heightened sensitivity and receptivity to field-based and nonlocal information normally outside of conscious awareness (Tomasino, 2011). It is postulated that such a psychophysiological shift enhances connectivity with spirit (Childre & McCraty, 2001).

As we use heart intelligence to begin to build a new relationship to our emotional experience, what markers can we expect to experience?

A first and vital step along the path of humanity's emotional evolution will be the development of increased *emotional self-awareness* – which, in turn, begins simply with the ability to reliably identify what we are feeling in any given moment. While seemingly basic, so many people do not yet possess this important aspect of self-awareness, being largely “numb” and removed from their emotional experience. Yet to the extent that we remain unaware and disconnected from the flows and dynamics of our feeling worlds, we also remain cut off from our capacity to *choose* how to direct these energies. It is awareness that opens the door to choice. Emotional awareness in itself has many levels of development, eventually yielding an extremely fine-tuned, objective understanding of the often subtle emotional dynamics that underlie our attitudes, thought patterns, and behaviours. Along with this heightened awareness comes the felt-sense of being “more than” the changing flows of our thoughts and feelings, even while being able to experience them fully at the same time. As we expand our emotional self-awareness, a related capacity we are able to develop is *relational awareness* – the ability to accurately perceive, understand, and sensitively respond to the emotions of others around us.

Emotional discernment is a next stepping stone on the developmental pathway. This constitutes the ability to distinguish feelings that are authentic drives within us from those patterns that are largely rooted in conditioning by society's norms or by influences from our own personal past. It also provides a finely nuanced read-out of the degree to which ego-driven emotional patterns (generally grounded in fear) contribute to the layers of our feeling world, often colouring our perceptions, motivations, and behaviors. And this discernment enables us to learn to recognize the *qualitative experiential difference* between the emotional flows and reactive patterns that source from this limited facet of our awareness and those that we may call “spirit-directed” – emerging from a connection to a larger, unconditionally loving aspect of our awareness that provides a bigger-picture perspective. As we grow in this capacity for emotional discernment, we gain a beneath-the-surface view of the emotional dynamics underlying much of our experience that can then inform our choice to begin to bring formerly “automatic,” self-sabotaging patterns into the light of our conscious awareness and control.

Before anything that is resistant can truly move, it must first be fully accepted. *Emotional acceptance* is a vital step that is too often overlooked by many schools of self-development and personal growth. In many cases it is actually our resistance to fully acknowledging, allowing, and experiencing certain feelings that keep patterns sourced by these feelings stubbornly held in place. It is the act of fully accepting, owning, and embracing an immature or “childlike” emotional pattern, with unconditional love and without judgment, that disarms it – melts its resistance – enabling transmutation. Heart vulnerability, self-love, and surrender are important capacities inherent in this facet of emotional maturation.

Once we have developed and applied awareness, discernment, and true acceptance that is grounded in self-love, we have paved the way for *emotional modulation* – an act of conscious choice. This capacity to *choose* how we wish to color and direct our emotional energy can be applied in different ways. With this capacity comes the advanced ability to effectively “slow down” or “expand” a sequence of moments in which we would have typically exhibited an automatic, narrowly-focused, emotional reaction, and to instead choose a response that is informed by a source of broader insight and understanding (Childre & Martin, 1999). Choice can also be applied over a longer-term timeline, as when we commit to practices that facilitate our adoption of a new emotional attitude, so that it becomes familiar and instantiated as a new neuropsychological “set point” (Childre & Rozman, 2006; McCraty & Tomasino, 2006).

PRACTICES TO CULTIVATE
HEART INTELLIGENCE
AND FACILITATE
EMOTIONAL EVOLUTION

Based on scientific research on the heart’s holistic, multilevel role in the human system (interacting across the physiological, mental, emotional, intuitive, and spiritual dimensions of experience) and the psychophysiology of heart-focused states, tools and practices have been developed that enable people to engage heart intelligence to begin to build a new relationship with their inner emotional dynamics. The system of heart-based tools and technologies developed by Doc Childre and the Institute of HeartMath utilize the heart as a point of entry into the psychophysiological networks that underlie emotional experience (Childre & Martin, 1999; Childre & Rozman, 2002, 2006). These tools enable people to self-induce psychophysiological coherent states,

and to become increasingly sensitive to the intuitive information available to us as we access these states. Such practices facilitate both a deeper and more finely-tuned self-awareness as well as the ability to make more conscious choices to intentionally modulate, transmute, and redirect patterns of emotional energy.

In addition to individual practices, increased attention is being given to the intentional development and expression of heart intelligence in group-based contexts. In such settings, people choose to come together with an unconditionally loving focus and unified intention to expand into heightened states of consciousness in a safe and supportive container. From this dynamic emerges a resonant, amplified field, as both the individuals’ and the collective’s energy becomes more focused, coherent, and refined. This amplified, coherent field appears to create an energetic environment that heightens emotional self-awareness and the potential for emotional growth and development to a much greater extent than would normally be possible for an individual alone. Among those visionaries who have been exploring the dynamics of the group resonant field as a facilitative container for growth and transformation are Doc Childre, Richard Moss (1981, 1986) Tej Steiner (developer of the “heart circle” model; 2006) and Christian Pankhurst (in press). In his book *The I that is We*, Moss describes the dynamics inherent in this process:

Focused group energy refers to the *conscious* orchestration of a natural phenomenon whereby human energy joins and amplifies when it is gathered around a unifying principle. This process is the single most powerful way, except for the direct experience of Grace, through which the energies available to the ordinary individual are amplified.

The state of unconditional love becomes the “air” into which conditional consciousness leaps in order to behold a new dimension. The state itself is an experience that transcends and therefore ultimately disturbs the boundary-creating mechanisms of our personal consciousness. Just being willing to attempt to realize this state begins a major shift in consciousness. As we open toward this new experience the very intuition of it subtly generates an atmosphere that inspires the potential within the individual (Moss, 1981: 118).

It is likely that as we continue to unfold the collective shift in consciousness, the power of coherent community to facilitate individual awakening will be increasingly appreciated and drawn upon (Pankhurst, in press).

IMPLICATIONS OF EMOTIONAL
EVOLUTION: A VISION OF
OUR AWAKENING POTENTIAL

As we step into the exciting ability to consciously repattern our emotional landscape, the implications will be vast. As fear and blame are progressively supplanted with love and self-responsibility at the individual level, the fundamental driving forces that shape our collective society will also evolve – leading to greater levels of cooperation, compassion, and connectedness than our world has yet seen. While technological development may continue, eventually it will be no longer primarily driven by motives of greed and domination, but by a collective drive to continue to evolve spiritually as a species and to further facilitate the expansion of consciousness.

In humanity's present collective state of awareness, our emotional nature represents a vast reservoir of largely untapped and unfocused energy. However, once we have begun to shift the immense power of our emotional energy from the unconscious sway of reactive mind to the *conscious direction* of heart intelligence, the door also opens to develop other innate human capacities that utilize this energy in highly organized and focused ways.

First, I expect that we will see an enhanced sensory capacity, stemming from a more consistent ability to access and utilize nonlocal intuitive perception. This is linked to the capacity to attune to a nonlocal object or event of interest by directing *passionate attention* – focused coherent emotional energy – toward it (Bradley & Tomasino, 2011; see also Bradley's article in this issue). The more agile we are in our ability to self-regulate our emotional energy, quiet our "everyday" reactive emotions, and consciously enter love-based psychophysiological coherent states, the more we will be able to draw upon and build this intuitive perceptual sense. Once more fully developed, this faculty will also enable us to attune more deeply to one another, giving rise to mature capacities such as "telepathic" information exchange among people, as well as enhanced interspecies communication. I also expect that the maturation of this direct receptivity to nonlocal information will radically change the way in which we approach the process of scientific inquiry.

A second, related competence humanity will grow into is an enhanced co-creative capacity. Also termed *nonlocal agency*, this denotes the ability to actively influence aspects of our reality by directing *passionate intention* – coherent emotional energy coupled with a specific intentional focus – toward objects or events we wish to affect

in some way (Bradley & Tomasino, 2011; see also Bradley's article in this issue). Again, our ability to work with this powerful ability will be proportional to our capacity to self-regulate and focus our emotional energy. Coming into a mature co-creative capacity will constitute an immense step in the evolution of human consciousness and will radically change our relationship to countless spheres of human activity – not the least of which will be health and healing (of ourselves, our fellow beings, and the Earth's natural environment) and technology. It is likely that an exciting new wave of technologies will emerge that actively interface with human mental and emotional energy.


While intuitive perception and nonlocal agency will become highly developed and integrated at the level of the individual, it is likely that increased recognition of the amplification effects of the group coherent energy field will lead to many more instances in which people gather in groups, for significant events, to further potentiate our intuitive and co-creative potential (e.g., see the discussion of the Global Coherence Initiative in McCraty & Deyhle's article in this issue). Thus, collective intuition and collective agency will be increasingly drawn upon as human beings learn to work cooperatively at the field level of reality for the good of our Planet and the realms beyond it.

POSTSCRIPT – LOVE: THE ALPHA AND OMEGA

Transformation begins with the embrace of love and leads to the first essential step, which is the transmutation of emotions. When you begin to tell yourself that your emotional stance in life is a distortion of your potential to love, then you have invited a flame into your life that will gradually destroy and transform you. Richard Moss, *The I that is We*: 20.

It has only ever been about Love. It was the beginning – the living, formative, guiding spark inherent in the heart of all forms and expressions of consciousness. And it was always the destination of all evolution, though the path has often been obscured, even buried beneath layers of the ambitions of the ego and ever-multiplying distractions of the mind. And, indeed, Love has always been the pathway itself, and the stepping stones contained therein. There is no growth, no expansion of consciousness, without Love. Love of Self powerful enough to discard outdated patterns of emotional reactivity that no longer serve us – and ultimately to Surrender our very concept of self to something far greater; love of Other deep enough to Look and See and Hear and Listen in new ways and thereby open layers of sensitivity and connection previously inaccessible to us; love of Love itself – our ultimate motivation – for there is no other end but to evolve into deeper, wider, more encompassing, and

more finely nuanced textures of love. Love that, in its ultimate manifestation, is Intelligence itself – a force beyond our wildest imaginings and at the same time contained in the deepest core of each of our hearts.

We have reached a point on the Planet where no amount of externally-focused technological development will yield the fulfillment it seeks to deliver until we have a new *internal emotional context* in which to apply it. Without the corresponding evolution and maturing of our emotional nature, the sum of our external development is at best unfulfilling – leaving us empty – and, at worst, dangerous to our Planet and ourselves. It is an imperative – our responsibility, to ourselves and to all of Life – to consciously, and with commitment, take on this next step in our maturation as a species. Heart intelligence will lead and guide the emotional revolution, allowing it to give way to emotional evolution – the next step in the development of consciousness: a journey through Love, by way of Love, into Love – leading us forward into a new dimension of experience – leading us Home. 

ACKNOWLEDGMENT

I am grateful to Doc Childre, founder of the Institute of HeartMath, for inspiring many of the core ideas and themes elaborated in this article. I also acknowledge the work of Christian Pankhurst and Richard Moss, which served as more recent sources of inspiration.

REFERENCES

- ARMOUR, J. A. (1994). “Peripheral autonomic neuronal interactions in cardiac regulation”, in: J. A. Armour & J. L. Ardell (eds.), *Neurocardiology*: 219-244 (New York: Oxford UP).
- ARMOUR, J. A., & KEMBER, G. C. (2004). “Cardiac sensory neurons”, in *Basic and Clinical Neurocardiology*. J. A. Armour & J. L. Ardell (eds.). 79-117 (New York: Oxford UP).
- BRADLEY, R. T. (2007). “Psychophysiology of intuition: A quantum-holographic theory of nonlocal communication.”, *World Futures: The Journal of General Evolution*, 63(2):61-97.
- (2011). “Resolving the enigma of nonlocal intuition: A quantum-holographic approach”, in M. Sinclair (ed.), *Handbook of Intuition Research*: 197-213 (Cheltenham, UK and Northampton, MA: Edward Elgar Publishing).
- BRADLEY, R. T., & TOMASINO, D. (2011). “A quantum-holographic approach to the psychophysiology of intuitive action”, in L.-P. Dana (ed.), *World encyclopedia of entrepreneurship*: 318-347 (Cheltenham, UK, and Northampton, MA: Edward Elgar).
- CHILDRE, D., & MARTIN, H. (1999). *The HeartMath Solution* (San Francisco: HarperSanFrancisco).
- CHILDRE, D., & MCCRATY, R. (2001). “Psychophysiological correlates of spiritual experience”, *Biofeedback* (Winter): 13-17.
- CHILDRE, D., & ROZMAN, D. (2002). *Overcoming Emotional Chaos* (San Diego, CA: Jodere).
- (2006). *Transforming Anxiety* (San Diego, CA: Jodere).
- GODWIN, G. (2001). *Heart: A Personal Journey Through Its Myths and Meanings* (New York: William Morrow).
- LEDoux, J. E. (1994). “Cognitive–emotional interactions in the brain”, in P. Ekman & R. J. Davidson (eds.), *The Nature of Emotion: Fundamental Questions*: 216-223 (New York: Oxford UP).
- (1996). *The Emotional Brain: The Mysterious Underpinnings of Emotional Life* (New York: Simon and Schuster).
- MCCRATY, R., ATKINSON, M., & BRADLEY, R. T. (2004a). “Electrophysiological evidence of intuition: Part 1. The surprising role of the heart”, *Journal of Alternative and Complementary Medicine*, 10(1):133-143.
- (2004b). “Electrophysiological evidence of intuition: Part 2. A system-wide process?”, *Journal of Alternative and Complementary Medicine*, 10(2): 325-336.
- MCCRATY, R., M. ATKINSON, AND D. TOMASINO (2001). *Science of the Heart: Exploring the Role of the Heart in Human Performance* (Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath, Publication No. 01-001).
- MCCRATY, R., ATKINSON, M., TOMASINO, D., & BRADLEY, R. T. (2009). “The coherent heart: Heart–brain interactions, psychophysiological coherence, and the emergence of system-wide order”, *Integral Review*, 5(2):11-115.
- MCCRATY, R., & CHILDRE, D. (2004). “The grateful heart: The psychophysiology of appreciation”, in R. A. Emmons & M. E. McCullough (eds.), *The Psychology of Gratitude*: 230-255 (New York: Oxford UP).
- MOSS, R. (1981). *The I that is We: Awakening to Higher Energies Through Unconditional Love* (Berkeley, CA: Celestial Arts).
- (1986). *The Black Butterfly: An Invitation to Radical Aliveness* (Berkeley, CA: Celestial Arts).
- PANKHURST, C. In press. *Accelerated Awakening*.
- STEINER, T. (2006). *Heart Circles: How Sitting in Circle Can Transform Your World* (Interactive Media).
- TOMASINO, D. (2011). “The heart in intuition: Tools for cultivating intuitive intelligence”, in M. Sinclair (ed.), *Handbook of Intuition Research*: 247-260 (Cheltenham, UK and Northampton, MA: Edward Elgar Publishing).
- ZAJONC, R. B. (1980). “Feeling and thinking: Preferences need no inferences”, *American Psychologist*, 35:151-175.



WORLDVIEWS AND EVOLUTION OF HUMAN CONSCIOUSNESS

PAUL VON WARD



Paul Von Ward, MPA & MSc from Harvard and Florida State University, is an interdisciplinary cosmologist and independent scholar. His career of public service (1960-1995) included roles as Christian minister, US naval officer, diplomat and foreign service officer, and founder and CEO of the former cross-cultural NGO Delphi International. His major books are Our Solarian Legacy, Gods, Genes & Consciousness and The Soul Genome. Website: www.vonward.com; paul@vonward.com.

THE *HOMO SAPIENS* SPECIES IS ON A PATH OF POTENTIAL self-extinction. At a crossroads, we face three self-generated armageddons: Catastrophic climate change. Global political chaos. Collapse of food and health systems. The escape route requires a common sense of global community. The most daunting obstacle to achieving that is not technology, funding, organization, or human resources. It is the pervasive existence of mutually exclusive, existential worldviews.

New York Times columnist David Brooks wrote “while global economies are converging, cultures are diverging, and widening cultural differences are leading us into [an unprecedented] period of conflict, inequality and segmentation¹. “I believe this deteriorating external situation results from an “increasing fragmentation of species consciousness.” Self-segregating subcultures are becoming ever more isolated. Through the selective use of modern media, they are further circumscribing their own members’ minds with self-limiting worldviews.

Given our near-universal communication networks and global markets – in ideas, goods and services – the above described fragmentation is counterintuitive. Nevertheless, virulent theological antagonisms are fuelling 21st century terrorism and social warfare – too often leading to violence – in all nations. Wealthy elites and sectarian cults have gone beyond traditional class barriers to separate themselves from others. Building fortress neighbourhoods and using defensive social policies,

they seek to avoid contamination by those who are different.

These trends indicate the human species is engaged in a profound re-tribalization process – at a time when weapons for defending culture and territory far exceed the destructive power of rocks and clubs. This inability of our fragmented species to reach consensus on economic, political, and social policies threatens our very survival. More than superficial lifestyles are involved.

This situation is an existential phenomenon. Sustainable social and economic policies require big changes in the present self-deprecating and self-abdicating ways most humans see themselves in the universe. A significant percent of humanity sees our existence as the accidental fall-out from an unlikely random collision of illusive particles. But, most humans think we are creatures of a God that has it all figured out in advance and we simply live and die according to His whims.

In either case, practically all humans think we are “just along for the ride” and have little control over our own destiny. This exegesis of worldviews suggests that such Second-Millennium beliefs must give way to a Third-Millennium updating of our human story to encompass new insights into ancient civilizations and discoveries in behavioral neuroscience and consciousness studies².

The result can be adoption of self-empowering worldviews that will literally change the world.

DEFINING WORLDVIEW

An Internet/Wikipedia search of the term worldview reveals it is widely used – with a great diversity of definitions. However, the importance of the concept is greatly under-appreciated. Little attention has been paid to its emotionally-charged impacts on individual and group behaviours. Superficial uses of the term worldview have obscured its fundamental role in the creation of wars, waste of natural resources, and retardation of human development.

One definition of worldview is a collection of folktales about human life and nature. Another is that it is a personal or group story, describing one’s place in society and nature. A third definition describes it

as a collection of presuppositions that guide social behaviour and give meaning to various life events. Unfortunately, these definitions minimize the importance of a worldview's role in the rate and direction of evolution in human emotions, mental functions, and behaviours.

The word worldview comes from the German *weltanschauung*, which literally means the way one views his or her world. However, what is lost in translation is the depth and power of this aspect of the mind and its impact on the continual reshaping of the human species and its habitat. While our individual and collective worldviews determine how we perceive our present reality, it also limits – or enhances – our future development. How we create our worldview determines what we can create – peace or war, health or illness, social harmony or civil distress, etc.

When two people discuss any issue, they are likely to do so from two different – even mutually exclusive – sets of assumptions about humans and their place in the bigger picture. For all perceptual, emotional, and behavioural purposes, we live in different realities. Individuals with radically different worldviews simply cannot cross the emotional lines required to draw similar conclusions from the same self-evident facts.

Examples of this are found in contradictory reactions to the human impact on our environment. The same divergent emotional reactions arise in discussions of the use of military force in cultural conflicts, the effects of chemicals in food and health, the education of children for future survival, population policies, and relationships with other species. We need to resolve these profound emotionally-based conflicts threatening the future of our species.

Such destructive emotions result from existential worldviews – repositories of a priori ideas accepted as truth – based in neural circuits that direct mental and behavioural responses to external information. These brain-mediated responses include deeply engrained assumptions, values, ethics, emotions, and survival reflexes. Only when these semi-autonomous responses are altered can changes in a person's overt habits, manners, relationships, and decisions occur.

These emotionally-charged worldviews are not determined by one's IQ level. Keith Stanovich³ described in the *Scientific American Mind* that high IQ can be easily trumped by emotions. People can be “cognitive misers” taking the easy way out when confronted with difficult choices. This happens because comfortably embedded worldviews overpower logically reasonable or evidence-based interpretations of reality.

While it is obvious that our brain-mediated worldviews emerge from interactions between biology and information, a working bio-info model of the human worldview mechanism still eludes us. We need multidisciplinary team efforts to trace the process in which abstract ideas shape our emotional and physical responses. Humans urgently need to understand how simple, implicit worldviews can have so much influence on our active thoughts and behaviours.

STORIES AS WORLDVIEWS

One way of thinking about worldviews is to see them as narratives or cultural stories. The religion-based Cradle of Western Civilization story is assumed by European and Western Hemisphere cultures to account for their modernity and technical prowess. However, cultures suppressed by the colonizers cherish their own story and blame the invaders for their destruction.

Sociologist Christian Smith, in *Moral, Believing Animals*, developed twelve contemporary “metanarratives” he considered to have shaped human behaviours⁴. They include the eponymous Capitalist Prosperity, Progressive Socialism, Scientific Enlightenment, Christian [Faith], Militant Islamic Resurgence, and Unity-with-Brahman narratives.

Successful implementation of one of these narratives requires tapping into previously existing worldviews. As an example, in the political and religious arenas, would-be leaders have learned to play on deeply embedded emotions. They use key words that trigger core beliefs to elicit changes in consumption, voting, or other behaviours.

Such efforts eventually fail if the public's fundamental assumptions are not consistent with the advertised narrative. The societal evolution promoted in this paper can only occur when individuals are faced with relevant and persuasive evidence important to them that is clearly incongruent with existing beliefs. Only then do humans shift to achieve an internal consistency.

Modern physical sciences can be seen as a collection of stories. Some deal with new discoveries or outstanding scientists who offer new paradigms in their disciplines. But, these science stories created from specific fields fail to reach the worldview level of an existential story. That is due to the fact that science is an epistemology, only a method to test specific aspects of worldviews.

A worldview based on a snapshot in the ongoing flow of science can only be a temporary proxy for the real, mostly unknown universe. Such a holding-place cosmology can and should use pieces of knowledge generated by science, but the unknown gaps will always be filled by beliefs.

Generally speaking, when practiced with an open mind, science is a self-correcting process (even when some individuals are attached to their own ideas or results). Conversely, religion in general is not interested in self-assessment and self-correction.

CONCEPTUAL WORLDVIEWS

Scholarly taxonomies of worldviews exist, but it is no surprise that they are reflections of their creators' own worldviews. They generally relate to the areas of expertise of the instrument maker, and illustrate philosophical points they wish to communicate.

Willis Harman⁵, as an example, developed a taxonomy of three distinctive worldviews: 1) Materialistic Monism sees everything in the universe as based in the material realm, with matter and energy as aspects of a single substance that produces the human mind. 2) Dualism assumes that mind and matter are separate and provide for both 3-D reality and paranormal phenomena. 3) Mental Monism assumes a universe that comprises consciousness, non-material dimensions, and the physical universe of science.

Dean Radin⁶ used these three worldviews to demonstrate how different human reactions to claims of mysterious UFO phenomena might contribute to a progressive shift in consciousness. Radin describes shifts from paranoia to inspiration and from absolute denial to open skepticism and links them to the individuals' changing worldviews.

Belief systems in others subject areas can also be categorized by these three worldviews. The founders of the Creation Museum in Kentucky have an idiosyncratic reading of the Bible. They believe that their God created the Earth in six 24-hour days, and that the entire universe is only a few thousand years old.

Anyone who does not agree with them, in their view, will have to experience the wrath of God when they meet him in heaven. The supernatural aspect of Dualism provides cover for Creation Theories because they cannot be disproved.

Conversely, the Materialistic Monism worldview provides cover for people like Richard Dawkins who do not accept the possibility of a consciousness beyond their notion of mind as an epiphenomenon of the material brain. He extrapolates from physical evidence of an evolutionary process, and declares that no a priori force could have orchestrated any of the evidence.

In both cases believers interpret the data to suit their purpose. They avoid discussing the fact that their basic assumptions cannot be disproved. Both sides count on their status as authorities to divert

any second-order criticism based on a meta-analysis of their logic.

In my view, attempts to construct a science-based cosmology to support a new big picture worldview must make sense of the increasing flow of new insights from quantum physics, genetics, epigenetics, ecology, anomalies in ancient history, neuroscience, consciousness studies, and other fields.

It must also take into account many areas of human experience not yet understood by science. They include near-death and after-life reports, paranormal sensing through physical space and other dimensions, perceived contacts with non-human intelligences, and intuitive knowing.

When I attempted such a synthesis a little over a decade ago the resulting model was one of a self-experimenting, self-learning universe filled with varying dimensional beings – fractals of its activating force. In this model, consciousness and matter are co-dependent for their mutual self-evolution⁷. Over the last decade, the cutting edge of science has corroborated some of it.

Such a theoretical cosmological worldview can be used to make sense of disparate phenomena and widely separated discoveries. But even if its extrapolations reflect accepted facts, it must also include plausible existential assumptions that readers are able to countenance. Otherwise, they will likely dismiss it despite the use of credible experience and evidence-based ideas.

For these reasons, in attempts to develop strategies for serious social change the first step should be identification of the underlying worldviews that are responsible for the problems. To deal with the most pernicious behavioural patterns, to use story or conceptual level worldviews would not make much of a difference. Only changes at the depth of teleological worldviews are deep enough to redirect the present schizophrenic evolutionary track of human consciousness.

TELEOLOGICAL WORLDVIEWS

Whether people are humanists or creationists, physical evolutionists or spiritual mystics, they have developed their own answers – or accepted answers produced by others – to three existential questions: Where did we come from? What are we doing here? What happens when we die? Regardless of experience and learning, all of us carry a set of beliefs that represents how we have come to terms with the absence of absolute answers to these three questions.

Teleological worldviews assume a purposefulness with which we can go to sleep at night despite having a less-than-100% level of certainty of its cause. We cope with this existential level of physical and mental anxiety by

articulating the best guesses we can offer ourselves. This makes it very difficult for anyone else to snatch away our “comfort blanket” of teleological worldviews.

A TELEOLOGICAL QUADRANT

For the last decade I have used a questionnaire designed to identify the range of teleological worldviews found in student groups, conference participants, seminar attendees, website visitors, church groups, etc. It appears to be a reliable method to categorize individual worldviews at the level of basic beliefs and working assumptions.

Its simple questions are designed to transcend cultural barriers (and, hopefully, language differences). By placing people into different categories based on their fundamental beliefs, it works across religious, educational, and class divisions.

The instrument ranks the strength of the subject’s beliefs in four different modes of thinking: Materialist, Supernatural, Mystical, and Integral⁸. When two individuals have high scores in different modes of consciousness, it is likely that they experience life as if they were living in different worlds or states of reality.

The questionnaire has 32 questions with four possible answers to each. Based on a forced choice principle, the response closest to the person’s own belief must be selected even if it does not precisely coincide with that person’s vocabulary. Each response is linked (unknown to the subject) to one of the four modes labeled above and described below. The four scores result in a profile of the respondent’s teleological orientation.

I: *Material*: Focuses on a material reality and depends on the five senses and human technology to validate one’s beliefs. Subordinates one’s inner experience to a need for physical confirmation.

II: *Supernatural*: Assumes a separate, divine realm from which one’s god rules daily events. Favors revelations from authorities about the unknown. Dismisses evidence contrary to belief.

III: *Mystical*: Believes unseen and spiritual energies control events. Sees humans as spirits with the ability to directly control outer reality through personal belief. Uses incantations and rituals.

IV: *Integral*: Accepts various ways of gaining knowledge, but subjects evidence to consensual validation by third parties. Seeks testable, multi-dimensional connections among all phenomena.

The questions are based on assumptions with no self-evident answers. Questions like “What is the design and purpose of nature? Why do things work as they do?” force subjects to select the best option for themselves from four like those below.

~ Yahweh created me. Mind rules. God/Allah decides all.

~ Nature is neutral. Allah/God is just. Humans have free will.

~ The universe is an accident. Life is governed by specific laws.

The quadrant which receives the largest number of scores is a predictor of how the individual will respond to a wide range of ambiguous circumstances. It serves as a lens through which the individual interprets one’s own behaviours, the words or actions of others, and external events. New issues or situations faced by the subject will be seen through the same unique perspective.

Since these teleological worldviews involve intangible aspects of life and the universe, they can be modified. Many people change from one supernatural religious sect to another, easily leaving behind the old and accepting a new theology. But such changes are not teleological; they do not require new existential assumptions. Conversely, a transformation from Evangelical Christianity to Atheistic Humanism does require a teleological death and rebirth of worldview assumptions.

Abandoning one and adopting a significantly different worldview can occur under a number of circumstances. Confrontation with clear evidence that one’s existing beliefs are not supported by objective reality is disturbing. We have the option of shifting views to make facts and beliefs congruent. Or we can deny the new information and tighten our hold on the existing beliefs.

The internal conflict is best settled by adopting new assumptions. Without a satisfactory resolution, the individual remains psychologically confused. Psychological manipulations or physical force can also result in the replacement of old worldviews.

One example of forceful change of a nature-based worldview was the campaign to make other groups adopt a fictional cosmology created by followers of Emperor Constantine. They based it on one of the Middle East ancient gods (Yahweh) and conflated it with distortions of the teaching of the reformist Yeshua. Forcing this Roman worldview on Hellenic and Pagan natural-science cultures by physical and psychological warfare led to a millennia-plus era of the Dark Ages.

This illustrates how powerful economic or military forces can redact the prevailing story, insert another version, and change the course of history. Such a new teleological worldview can be used by autocratic groups (as in the supernatural Roman Christian strategy) as a psychological weapon to condition second and later generations to unquestionably accept its false assertions⁹.

Forced worldviews can be used *ex post facto* by plutocrats to maintain vested interests. They can be used to wage religious, cultural, economic, and military wars in and among civilizations.

Hitler's regime was a relatively recent effort to erase the teleological worldview in one region by demeaning psychological manipulations and vicious genocide with the goal of creating a new society based on different existential assumptions. He failed due to more resilient worldviews.

At this point it is obvious that such deeply ingrained teleological worldviews are developed by Sunday School-level lessons or mass media campaigns. However, we need to examine how simple words can assume such power over human responses to other people, ideas, and events.

NEUROSCIENCE AND WORLDVIEWS

Why do humans willfully dismiss new knowledge that would be useful to their security, health, or quality of life? Part of the answer is that our embedded worldviews have a prioritized set of brain reflexes based in previously created neural networks that link specific experiences with either pleasurable or painful feelings about them. If you have positive memories of a summer of rich food and sex in Rome, pictures of the city activate agonist neurotransmitters that facilitate a sense of pleasure. But, if you believe the Pope speaks for a God that demands penance for such sins, images of Rome may activate antagonist neurotransmitters that inhibit a sense of pleasure.

Without a set of consolidated neural memory circuits to direct incoming sensory data, the brain would become totally confused when presented with conflicting options. It would send mixed signals to both sensory and motor neurons. To avoid this, conscious organisms create a hierarchy of beliefs, ranging from a few that are considered immutable to many that are more mutable. This hierarchy (worldview) is continually reconsolidated by various levels of new learning.

Learning occurs through internal musings, active dialogue with others, and through emotional and physical experiences. This multiplicity of learning feedback loops makes it possible for individuals to influence others and be influenced themselves. However, any external input is mitigated by the individual's own worldview predispositions.

As an example, psychologists observe that people experiencing themselves as being in a low status generally generate more fear and other negative emotions than people who perceive themselves in a higher class. The latter group, with a less overpowering amygdala (base of fear response), can use

their prefrontal lobes to act more rationally when in the same situation.

While class differentiations shape us, individuals can modify their sense of self with group support for a change in group assumptions about status. For instance, a racial hierarchy in a particular region that disempowers the lower class can reduce this amygdala-effect by creating a new set of social categories (religious, national or cultural).

At this point, it is important to note that these reciprocal social influences in the evolution of personal worldviews are only a part of the subconscious interactions among humans. While our physical brain appears to be separate from others, the consciousness that defines each of us is actually a local manifestation of a larger field of quantum particles activated by an information cloud in our quantum universe. Thus, we are influenced by, and influence, everyone else through subparticle entanglements. This insight from physics suggests concepts/beliefs embedded in the memory sections of one brain are, to some degree, linked to all other brains.

This reciprocal model of evolutionary development involves ongoing dances between two people, group interactions, and exchanges of views and experience at a distance. How we view ourselves in each of these relationships is important. David Brooks more recently¹⁰ introduced to his interested readers several neuroscience insights I believe are relevant to this discussion.

In one experiment, Americans felt rewarded if they had considered themselves in a dominant situation. Japanese also experienced a sense of reward, but when they believed they were in a subordinate situation. That the brain's caudate nucleus activated a sense of reward equally for these apposite worldviews demonstrates different self-images still produce the same effect. Another study reported that Arabs viewing images of painful circumstances for subjects they considered Arabs were perceived to involve a higher level of suffering. Jews in the study rated the level of pain higher when they considered the group suffering it was not Jewish. It suggests exposure to the same images elicits different reactions depending on a group's worldview.

In the same research, both Chinese and Americans believed the pain was higher when they perceived it was happening to members of their own group than to another group. Once again, the brain (anterior angular cortices) reacted according to their worldview's self-identification.

This line of research suggests that humans have synapse-based positive and negative feed-back loops which select the neurotransmitters that determine

whether we feel happy or sad, but which one expresses itself depends on existing embedded worldview choices. At this point, we do not understand how different intellectual concepts can become drivers of the same neural responses.

My intuition leads in the direction of energized ideas having a similar impact on brain cells as epigenetic forces have on DNA. In other words, the repetition of spoken ideas by individuals we perceive as authorities above us or a recalling of personal experiences lay down new memory-linked circuits. While this is speculative, some process interlacing abstract ideas and physical neurons is necessary to account for inculcation of new ideas in some people but not in others.

I am not aware of any behavioural neuroscience project focused on this conundrum. Much work focuses on recording the brain images evoked by thoughts, but these bottom-up responses do not tell us how top-down views are incorporated. Nevertheless, once these mind-brain connections are made, changes in worldviews become difficult.

EXHUMING IMPLICIT WORLDVIEWS

During four decades of cross-cultural work on personal, scientific, political, and religious issues as a diplomat, educator, and psychologist, I was exposed to worldviews in a hundred countries. Identifying and understanding their varying assumptions about fundamentals was essential for cross-cultural communication and cooperation. This experience provided innumerable examples of behaviours linked to teleological worldviews like those discussed above.

When people speak and act on worldviews so deeply inculcated since birth they are unconscious of the fact they are simply beliefs. At a conscious level the beliefs are taken as real as one's hand.

These beliefs – regardless of the lack of objective, external evidence – form a gyroscope-type mechanism that insures the individual's behaviour remains consistent with his or her subconscious sense of self. Such life-defining parameters are embedded over time in personality-developing experiences. They resist ideas or interpretations of events contrary to their worldview reality.

The last speech prepared for John F. Kennedy before his 1963 assassination included “We in this country, in this generation, are – by destiny rather than choice – the watchmen on the walls of world freedom. We ask, therefore, that we may be worthy

of our power and responsibility. [He was then to quote “Except the Lord keep the city, the watchman waketh but in vain”].

Had he lived, Kennedy's actions would have been taken with a sense of certainty that he was doing God's work and that he really had no other options. He would have had discussions with his advisors and heard public opinion, but the implicit assumption that he and his nation were instruments of God would never have been questioned. Yet it energized his decision making.

Working with renowned psychologist David McClelland in graduate studies at Harvard in the 1970s, I learned how one's unconsciously chosen words point to the emotions and behaviours that make up a unique personality. That research eventually led to the above-described process for exhuming people's largely unarticulated, but powerful mind-brain patterns like the following.

A fundamentalist Christian politician who “knows” that God speaks to him through his pastor will unquestioningly follow his dictates in making a decision for all citizens regardless of their views and civil rights. A fundamentalist Muslim who “knows” that Allah speaks to him through his imam will unquestioningly follow his dictates to fight the enemy, even killing himself. Such is the impact of theocratic worldviews on both believers and the victims of their policies.

A political example in the United States is evidence that a person's policies on public education “reflects the deepest differences between liberals and conservatives [...] because every educational conversation must start with [a] fundamental philosophical question [...] Our beliefs about the purpose of education are rooted in even deeper beliefs about the nature of humanity¹¹.”

Author Sara Robinson's research corroborates the power of theocratic worldviews. She writes “conservative [religious-based] politics springs from one central premise: they believe that human beings are essentially fallen and deeply flawed. Human beings are swayed by uncontrollable passions, we make consistently bad choices and we are incapable of governing ourselves. Given our basic depravity, civilization can only work if we submit ourselves to the external guidance of society's appointed authorities, and stay on the straight and narrow path our betters have clearly marked out with rules, oversight and punishments.”

The worldview underlying this perspective is theocratic fundamentalism. From its perspective, people are born evil, destined to a life of eternal punishment by a demanding god unless they subject themselves to the conditions established by religious authorities.

Given these beliefs, educational institutions set the boundaries, impose order by suppressing the child's own potential, and make sure that the existing world order must be preserved. Their social goal is to develop dependent personalities that continue to be susceptible to the will of religious leaders.

A positivist humanistic worldview has a different perspective: Self-realization is the goal of public education. Its purpose is to develop minds who challenge the status quo, seeking wider horizons for exploration. Self-responsibility, consensus building to promote social development, and experimentation with self-governing are crucial in this model of public education.

This worldview leads to public education policies that develop democratic principles. They are based on assumptions that people are basically good and can learn to be trusted to make moral choices. Students are encouraged to be different and explore their talents and aspirations.

A worldview shaped by unprovable assumptions gives the person holding it license to either dismiss factual material or create "facts" that are not real. A former US Navy chaplain and leader of a fundamentalist religious group recently appeared on a TV show to criticize President Obama's personal view of same-sex marriage as a civil right. The chaplain did not say his view was also a personal opinion; he tied it to an unproven belief that that gay people secrete invisible, evil creatures that find and possess certain animals, turning them gay as well¹².

Many scientists fall into the opposite parallel of the logical trap illustrated by the Navy chaplain. A researcher may conclude that we humans are alone in this solar system because he has not personally seen a member of a more advanced species on Earth. But he cannot logically declare that no such beings exist or that if they did, they have not been here. The circumscribed absence of evidence offered by the researcher does not prove that they might exist.

The relevant point in these two examples is that regardless of whether a particular worldview belief can be proven or not, it causes the same brain-mind stimulations of the central and peripheral nervous systems. Informal surveys suggest invalidated major worldview beliefs exceed the number of major beliefs that are fact-based.

Where existential beliefs are involved, unproven ones seem to be the most difficult to change.

Depending on the level of psychological threat involved, any effort to change one's unproven assumptions may only strengthen their emotional defensiveness. Simply pointing out the difference between belief and reality will be futile. Unless individuals perceive they have experienced a life-changing

event (as Saul and Mohammed did in their respective roles in the creation of Christianity and Islam), changing worldviews is a complex process.

An educational or social change strategy that ignores the brain-based, emotionally cloaked reality of fundamental worldviews will be attempting to change the inner core of a human personality from the outside. It goes counter to evidence that worldview shifts are internal.

A case in point is a group concerned about the increasing dehumanization of various groups (homeless, unemployed, the mentally and socially disadvantaged, etc.). They eschew teaching new concepts via textbooks or distant-media learning. They try to engage those doing the dehumanizing to learn from their own personal experiences. Much more research on hands-on-changes in beliefs that deal with worldviews is needed.

AMENDING WORLDVIEWS

Obviously human worldviews change incrementally in our exploration of the Earth and beyond. They also marginally shift through the course of political and economic upheavals and cultural conflicts. As in the Roman case described above, significant new worldviews may be forced on a population over time by powerful groups with adequate resources and no qualms about force.

However, up to the present, no widespread, self-guided, transparent up-dating of our prevailing worldviews has been undertaken. A species self-experiment of such a magnitude would require a broad consensus among disparate groups who already acknowledge contradictions between new important areas of scientifically validated evidence and the tenets of out-dated belief systems.

Such an effort would be a daunting, if not impossible, task. Who would undertake a global effort of this magnitude? They would have to challenge the most coveted assumptions about the places of gods, humans, other intelligent species, and non-physical beings in this universe and beyond.

Nevertheless, I believe the relevant principles, methods, and technologies are now available to us. I also think that sufficient interdisciplinary evidence indicates that human consciousness is on a self-destructive evolutionary track. Fortunately, it appears, that evolving research efforts now in separate fields could be integrated to assemble a new, more plausible teleological worldview.

Given the dire nature of current social, economic, political, and technological trends, we really have no other option if we wish to avoid a self-imposed disaster of global proportions. Due to the prevailing

worldviews held by the leaders of major institutions, they cannot be expected to take the lead. Self-identified open-minded scholars, social activists, independent-minded scientists, and highly motivated volunteers from all walks of life must take the lead.

Everyone motivated to make a contribution to the survival of *Homo sapiens* potential must demonstrate how out-dated, mistaken, self-retarding, and false assumptions in prevailing worldviews are responsible for the challenges that now face us. With such analyses in hand, they can challenge large institutions to introspectively analyze their contributions to the problem.

A few brave groups willing to challenge the status quo at a level of intelligence and specificity difficult to ignore may help the species avoid losing our place on this planet and beyond. They will need a coordinated campaign to construct a new teleological worldview based on the edges of scientific exploration, including areas of research dismissed by backward-looking scientists.

Because our present core assumptions in our existential and teleological worldviews derive from life experiences and changing cultural knowledge, we know they are mutable through new experience or learning. Small group efforts indicate that people can collectively transform their specific worldview assumptions if the individuals are generally predisposed. However, such change is not easy and requires serious steps of conscious reevaluation and belief change¹³.

CONSIDERING SPECIES-SAVING INTERVENTION

The case is very strong that humans are in a self-made crisis based on worldviews that benefit a few and subject the masses to their consequences. Modern supernaturalism and materialism are based on assumptions that are conducive to their founders control over human consciousness.

The same charge can be made about any institution that demands unquestioned faith in the infallibility of its leadership. Authority figures in political, military, corporate, and educational institutions use their control over resources, access to lucrative positions, and less tangible rewards as recognition and reputation to keep people in line with their prevailing worldviews.

At this point in history, there are no incentives for the most powerful shapers of worldviews to upset today's status quo. The extreme conflicts among belief systems generate fearful emotions in their devotees that enhance the leaders' power over them. Demagogues excite the emotions that raise volunteers, voters, and funds to protect their interests, even to the point of the faithful sacrificing themselves to cultural wars, even to taking part in suicidal missions.

Given their benefits, the most powerful institutions on Earth have no interest in supporting a revolution in human consciousness. However, without a constructive fundamental shift in worldviews, the challenges of climate change, over-population, internecine strife, deteriorating physical health, and isolation from other intelligent life cannot be met. We are immobilized by these opposing sets of worldviews.

The existential progress of our species is stalled between the grips of supernaturalism and materialism, and they get no help from large groups of ineffectual mystics who think they can dream us out of a quagmire. The most difficult obstacle to change is that we are caught between belligerent protagonists promoting mutually exclusive theism and atheism. We need a new path.

The teachers known as Buddha and Lao Tzu (two-and-a-half millennia ago) objected to the theistic model that had grown from early human experiences with more advanced beings. These two wise men saw that humans had been trapped by their own other-worldly projections on legendary rulers. They urged avoidance of superstitious, anthropomorphic spiritual beliefs. Their teleological approach was to identify self-evident principles in nature.

The starting point was a neutral investigation – without a priori attitudes – in their attempts to penetrate the mysteries of life. They dealt with fanciful beliefs from a neutral position, analyzing them, and developing conclusions based on reasonable use of facts. Unfortunately, their and later Middle East efforts to develop natural science and philosophy were smothered by the god cults blossoming over the next two millennia. Supernaturalism reigned throughout the Western world.

A moment of opportunity for fact-based worldviews arose during the Renaissance. Science re-discovered the natural Hellenic worldview and broke through many superstitions. Unfortunately the new burst of scientific thinking was soon captured by the Industrial Revolution. The realm of supernaturalism was left to the theologians. Without a check on each other, the dominant human worldviews were divided into material science and mystical theology.

Neither perspective can move *Homo sapiens* to a truly new level of consciousness evolution. To create a new meta-worldview will take many independently-thinking scholars who can admit that their basic beliefs are just that – subjective assumptions based on partial information. They must be willing to open their research, writing, and teaching to address the following questions:

What do we really know about the origins of life?
... the outer boundaries of human consciousness?
... the mechanisms that insure self-learning evolution?
... how deeply and widely do life forms self-propagate in the universe? ... the evidence of transcendent minds... and more.

Such an effort will lead to greater consensus on tentative, open-ended answers to the preceding questions. All disciplines and institutions can become more vulnerable. They can publicly admit to the fragile basis of the continually shifting evidence that now underpins major worldviews.

Discoveries obtained in the above proposed search for answers will lead to a more inclusive worldview necessary to global community. Confessing that we do not know it all, regardless of our positions in society, has the possibility of holding together our threatened species. ☉

¹ Brooks, D. Column, *New York Times*, August 11, 2005.

² Von Ward, P. (2011). *We've Never Been Alone* (Charlottesville, VA: Hampton Roads Publishing)

³ Stanovich, K. (Nov. 2009). "Rational and Irrational Thought" in *Scientific American Mind*.

⁴ Smith, C. (2003). *Moral, Believing Animals*. (New York: Oxford UP).

⁵ Harman, W. (1990). *The Global Mind Change*. Boston: Grand Central Publishing).

⁶ Radin, D. "Shift at the Frontiers of Consciousness", *IONS Newsletter*, (winter) 2008-09 (21): 22-27.

⁷ Von Ward, P. (2001). *Our Solarian Legacy* (Charlottesville, VA: Hampton Roads Publishing).

⁸ Von Ward, P. Details and process are online at <http://www.vonward.com/selfassessmenttools.html>.

⁹ Von Ward, P. (2004). *Gods, Genes & Consciousness*. (Charlottesville, VA: Hampton Roads Publishing).

¹⁰ Brooks, D. (Oct. 12, 2009). "The Young and the Neuro". *New York Times*.

¹¹ Robinson, S. Altnet. May 18, 2012. http://www.altnet.org/story/155469/how_the_conservative_worldview_quashes_critical_thinking_and_what_that_means_for_our_kids%27_future?page=entire.

¹² Webster, S. *The Raw Story Website*. Accessed May 18, 2012. <http://www.rawstory.com/rs/2012/05/18/former-navy-chaplain-insists-gay-demons-can-infect-animals/>.

¹³ Von Ward, P. *AHP Perspective*, http://www.ahpweb.org/pub/perspective/nov2005/nov_menu_2005.html.





ENGAGING THE PLAY OF CONSCIOUSNESS IN SUSTAINABLE DEVELOPMENT

G A I L H O C H A C H K A



Gail Hochachka, BSc, MA, project coordinator with the non-profit organizations One Sky – The Canadian Institute for Sustainable Living and Driшти – Centre for Integral Action, and co-director of the global network Integral Without Borders, works in international development using integral principles. Her focus is on the need for greater synthesis

and integration between disciplines in this field, particularly between social change theory, systems theory, and consciousness studies. She has carried out action research and been involved in projects towards this integration in rainforest conservation, capacity building, leadership development, climate change adaptation, and community resilience in different countries of Latin America and Africa. She is a published author including the book, Developing Sustainability, Developing the Self: An Integral Approach to International and Community Development, as well as several articles in Journal of Integral Theory and Practice, Trialog, and Ecological Applications.

INTRODUCTION

“Mankind,” said Plotinus, ‘is poised midway between the gods and the beasts.’ [...] For if men and women have come up from the beasts, then they will likely end up with the gods. The distance between man and the gods is not all that much greater than the distance between beasts and man. We have already closed the latter gap, and there is no reason to suppose that we shall not eventually close the former. As Aurobindo and Teilhard de Chardin knew, the future of humankind is God-consciousness [...]. But if men and women are up from the beasts and on their way to the gods, they are in the meantime rather tragic figures. Poised between the two extremes, they are subjected to the most violent of conflicts. No longer beast, not yet god – or worse, half beast, half god: there is the soul of mankind. Put it another way, humankind is an essentially tragic figure with a beautifully optimistic future – if they can survive the transition.” (Wilber, 1985: viiii).

TENDERLY HANGING IN THE BALANCE BETWEEN beasts and gods, here we find humankind. Surely one of the more enlightened species, yet one who’s complexity of consciousness creates problems as well as provides solutions. Today’s environmental and social crises are created by the

very human mind that can also undo them. Our potential for this, however, is only half realized. We have further to go.

The field of international sustainable development is concerned with how we, as a human family, are doing at this moment on the planet – how are we living with each other and with nature. It’s main focus and objective is nothing less than the wellbeing of our planet. In this article, I suggest that this wellbeing is arrived at via engaging in the development of consciousness, as it arises in self, behaviour, culture and systems, from a place of deep presence in our own awareness. With an integral approach to international development, as written about by Ken Wilber (1985, 1995, 1999, 2000, 2002, 2005, 2006) and practiced by numerous individuals and organizations all over the world¹, integral practitioners bring a particular understanding of consciousness into the practice of development. Below, I will describe two key aspects of how consciousness is engaged in development from the perspective of Integral approach used in Latin America and Africa.

Historically, international development tended to largely focus on exterior indicators of change, the idea being that interventions for increasing economic growth would assist the other domains of life (Hochachka, 2009). The adage underpinning this conventional approach to development was, “a rising tide lifts all boats,” and in truth it did support gains in many arenas, providing, for example, important advances in education and medicine. And, surely as nations moved out of abject poverty, other facets of their development could arise. In fact, it is not economic development that an Integral approach takes to task. Rather, it is the exclusivity of that as the main focus, without a concurrent understanding of how human consciousness and culture also weave into the overall achievement of social wellbeing.

The Integral approach provides a rigorous integrative framework for how to include interior development including yet going beyond the more usual focus on exterior, largely economic, development. This approach has been extensively written about by Ken Wilber (2006) and has been applied by hundreds of practitioners in various fields (see *Journal of Integral Theory and Practice*), many of which pertain to sustainable international

development, such as, climate change (O'Brien and Hochachka, 2010), community development (Hochachka, 2009), and ecology (Esbjörn-Hargens and Zimmerman, 2008). In international sustainable development, an integral approach essentially includes:

a - A more dynamic, practical integration of disciplines particularly those under the broad umbrellas of psychology, cultural studies, behavioural science, and systems science,

b - A greater understanding of development, including interior development (evolution of consciousness and culture) as well as exterior development (evolution of behaviour and systems), and

c - A frame of reference or a way to 'hold' reality from a deeper seated place in one's own consciousness, one in which Spirit is recognized and honoured.

To read more about the dynamic integration (item a) that an Integral approach provides, there are other articles written which articulate and give examples (see Hochachka, 2009). In this article, I touch particularly on the inclusion of consciousness in development, as it arises in the final two points b) and c) above.

THE WAY TO WELLBEING IS UP

In a historical moment where hierarchy has been heavily criticized and deconstructed, it is rare to find a developmental approach brought into mainstream practice. Drawing on developmental psychologists (Kegan, 1994; Cook-Greuter, 1999) as well as systems' theorists (Koestler, 1990), Wilber introduced the idea of *holarchy* to be a hierarchy of nested wholes, each with increasing depth and inclusivity. His work suggested that reality is construed of this holarchy, with everything being part of a larger whole, all the way down and all the way up. In the same way a letter is part of a word, which is part of a sentence, which might be part of a book, the earlier developmental stages we formulated in our consciousness when we were children are still parts of the later stages that were learned and embodied as we grew up, creating a similar interior holarchy of being.

This holarchy of these stages of consciousness – from our earlier selves through to our later, more complex selves – matters in sustainable development because it is how our world changes. Wilber refers to the general worldviews of egocentric, sociocentric, worldcentric, and kosmoscentric to refer to these deepening, complexifying stages of consciousness. With each transformation up this holarchy, comes a greater ability to include perspectives and extend compassion more widely. Children are naturally egocentric, as they stabilize their sense of

self. They gradually orient sociocentrically, to their family unit, their extended social group (tribe, neighbourhood, community), to their nation-state. And hopefully they grow into a worldcentric orientation, extending care to communities and nations on the other side of the planet, to other species, and to groups of 'others' that they don't normally self-identify as being part of. As one's consciousness changes along with it does one's self-identity and behaviours, as well as the way one constructs culture and designs systems. In other worlds it has ramifications throughout the manifest world one participates in.

The key characteristic of later levels of consciousness is that, from those stages, more perspectives can be taken. The significance of that cannot be understated. Especially in times of social conflict, environmental degradation, or extinction of other species, we need avenues in our consciousness to take perspectives beyond our own, and thus enact greater degrees of care. The social achievements that have marked the past century, such as the abolition of slavery, women's liberation, and environmental awareness, have all been arrived at via a stage of consciousness present in humanity that was sufficient to take perspectives of the so-called 'other' and extend greater depths of care and concern. In fact, even the field of international development itself arises from a later stage of consciousness, one that is genuinely concerned for the wellbeing of nations and care for the planet as a whole, not predominantly concerned with one's own family, tribe, company, nation or bioregion, as has been historically the case.

So, the way to wellbeing is, on the one hand, vertical. Later stages of consciousness inherently lean towards sustainability and worldcentrism. That said, on the other hand, wellbeing can also be horizontal. That is, how healthy one is in one's current development is also an important factor in overall development.

Point being, with an Integral approach, we take the word, "development", seriously. It's not just about bridges, roads, and incomes levels. But also about how much of reality one can include in one's consciousness through greater perspective-taking and increased care and concern, as well as how healthy one can be at whatever stage of consciousness one is currently experiencing. How consciousness develops, then, has become a main focus of the field of integral studies, and is one that we are continually practically inquiring into in our work in sustainable development.

Integral Theory draws on developmental psychology to describe how this holarchy of consciousness develops: how each stage births a new perspective, fills out that

perspective with ways of knowing, being, and doing, eventually coming to its own limits and then transforming to a new stage. When, however, there is an obstruction or imbalance, then stasis or regression from that natural unfolding occurs. When the flow of development gets stuck, our work is to inquire into where it's stuck and why, and to work towards how it can be released for the inherent development to re-engage.

This is quite commonly understood in the work of psychotherapy or counselling. When we work in systems and social change, we apply similar thinking, with some important adjustments, to the collective domain.

In international development this understanding of consciousness helps us not fall into the retro-Romantic view of development being a return to a Golden era of indigenous perfection. Nor does it fall into the industrial, neo-colonial view of 'third world' and 'first world' countries participating in a linear race to a Western- and economically-defined endpoint. Instead, it sees that healthy development arises as a series of 'nested wholes' *where overall wellbeing results from each stage being healthy and well-integrated.*

Thus, integrating consciousness into development practice includes perceiving the whole unfolding as a holarchy, assessing sticking points and working to release those blocks that stand in the way of an inherent impulse towards evolution. It also includes laying the emergent ground for a worldcentric expression of consciousness, while also contributing to the conditions out of which healthy expressions of all of stages of consciousness can arise. The work involves continually engaging these various dimensions of assisting all stages to manifest as healthfully as possible, as well as contributing to the emergence of a worldcentric (and kosmoscentric) stage from which sustainability and a sustainable development are inherent features.

Below, I share one example from a leadership for sustainable development project in West Africa to assist in illustrating how this looks in practice.

CONSCIOUSNESS AND LEADERSHIP DEVELOPMENT

One of the most recent examples of how consciousness development is brought into sustainable development work is found in the Canadian Non-Governmental Organization One Sky's work in Nigeria. One Sky ran a three-year integral leadership development program that engaged thirty emerging leaders in the social change sector in Cross River State, Nigeria. The One Sky team was made up of integral practitioners from a variety of backgrounds such as social work, life coaching, community development, and human rights. Their unifying framework was the integral approach to

leadership and sustainable development. The programme sought to work with the holarchy of consciousness development in a very particular way, which I'll explain here².

As described above, entering into a context, an integral team must first take stock of what is present, where is there flow and stasis, and where is there 'emergent ground' for transformation. This occurred with the One Sky team through a baseline assessment that sought to anchor this project in what is most meaningful and relevant to participants (their current worldview) as well as to align with where they are growing toward (new worldview). Findings from the assessment – which began in year one and continued throughout the three years – were used to create, adjust and refine the leadership curriculum and activities to be in meaningful resonance with the interests, understanding and values of participants. The assessment used mixed-methods: using objective measurement tools (employing a third-person perspective) such as observation, participant-observation; intersubjective methods (employing second-person perspective) such as group dialogue and interviews; and subjective methods (employing first-person perspective) such as reflective inquiry and mindfulness.

Examples of some of the aspects included in this assessment are listed below.

Interior competencies and consciousness:

- 1 - General stage of consciousness of the group (with some sense of where the leading edge is, held by certain individuals);
- 2 - Approximate stage of consciousness for the cognitive line (ability for perspective-taking, complexity of mindset, mental models for time and space);
- 3 - Approximate stage of consciousness for interpersonal line (ability for cross-perspective dialogue);
- 4 - Approximate stage of consciousness for self-identity (at times referred to as self-stage, with a particular focus on self-esteem and self-confidence as a leader);
- 5 - Approximate stage of consciousness for moral line (ego-, socio-, world-centric).

Exterior skills:

- 1 - Skills for establishing and mainstreaming gender equality;
- 2 - Communication skills (written, spoken, conflict engagement);
- 3 - Project management skills (project cycle from visioning, through implementation and reporting);
- 4 - Skills with influencing systems such as policy dialogues and good governance advocacy;
- 5 - Networking skills.

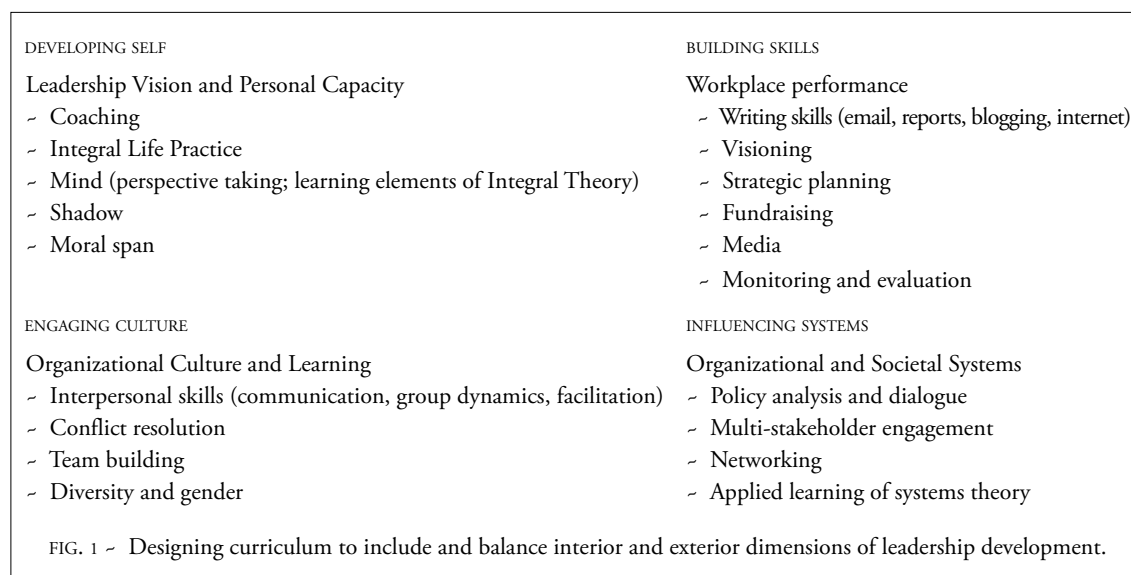
We aligned our curriculum design to the findings and recommendations of this assessment. One particular recommendation was to assist in providing the conditions for stabilizing an ‘achiever’ stage of consciousness (Cook-Greuter, 1999), which is the also the emergence of a worldcentric stage (Wilber). We did this partially through including skills and competencies in ‘all quadrants’ of the integral approach, including *developing the self*, *engaging culture*, as well as *building skills* and *influencing systems* (FIGURE 1). Integral theory suggests that fostering a balance in all these dimensions of being (referred to as quadrants in Integral Theory) assist in laying the emergent ground for a healthy expression of an existing stage, and may catalyze transformation to the next unfolding stage.

This attunement to the context and needs in the leadership participants continued throughout the three years, sometimes re-orienting our entire design for a workshop or shifting the flow of where the curriculum was headed.

from’, the team did not use an empirical tool like that of the SCT. These more validated, empirical results helped the One Sky team see the value in its more grassroots way of assessing stage of consciousness and also served to orient the leadership program to better serve the leading edges of consciousness in the group.

Secondly, it also challenged the biases that some people may hold about Africans. The person evaluating the SCT results said that these scores are exactly what one would expect to find in any group of leaders in a North American organization, for example. This is an important finding that debunks some of the myths about Africa and calls into question the many unexamined cross-cultural assumptions that are simply incorrect.

In this example, the leadership program sought to provide a curriculum that would foster a healthy



At the end of year two, we had the opportunity to have the sentence-completion test (referred to as the SCT or the Leadership Development Profile) done with all participants. The results, depicted below in FIGURE 2, found that the vast majority of the group were at an achiever-worldcentric stage of consciousness. This was interesting for a couple of reasons.

First of all, they corresponded with our baseline assessment’s main recommendation – to assist the stabilizing of an achiever-worldcentric stage of consciousness. Though the One Sky team had studied these developmental stages of consciousness thoroughly and also employed an array of methods to get a sense of ‘where people are coming

expression of the existing stage of consciousness, and also provide the stimulus, the challenge and support for a shift to the next stage. Not only did the four leadership retreats support this, but also the participants’ ‘break-through initiatives’ did as well. These initiatives that were designed and carried out by participants in the surrounding communities to address the pertinent issues in the region, such as HIV/AIDS, climate change, loss of biodiversity, women’s empowerment, and youth employment. Each initiative was an opportunity to apply what one had learned, and stretch into the new ground of consciousness evoked by their learning and engagement in the program. Additionally, the program included integral coaching as a transformative, one-on-one approach to scaffolding the changes in consciousness towards new ways of being.



FIG. 2 ~ The spectrum of levels of consciousness found in the One Sky leadership program. Expert-Late Expert would be more sociocentric stage of consciousness. Early Achiever through to Individualist is considered worldcentric. And Strategist and higher tips into a more kosmoscentric stage. (Wilber, 2006).

CLARITY FROM THE STUDY OF CONSCIOUSNESS

Integrating a more robust understanding of how consciousness develops helps to avoid some of the common pitfalls in the field of international development. There are three important ‘facts’ about how consciousness develops that help in this way. Firstly, everyone is born at zero – as children who develop through the infant and early childhood stages – so we are all beginning from the same starting point, no matter what. This assists in flattening the playing field, so that no one is superior to another simply by the fact that we all start from the same point in our consciousness development.

Secondly, although ‘life conditions’ seem to be critical in the subsequent development through childhood, adolescence and adulthood, that doesn’t exclusively refer to affluent systems or support structures. In other words, poverty does not indicate one has less chance to develop through these stages. Lack of education, perhaps; but not poverty in and of itself. There are frequent and substantial examples of individuals who sourced the support and challenge they needed to reach later developmental stages through other ‘life conditions’ beyond the material, such as, through interior inspiration, cultural support, community well-being, and spirituality.

Thirdly, drawing on many developmental psychologists, Ken Wilber points out that in any given population, there is an approximate breakdown of a larger percentage of people who act from egocentric to sociocentric stages and a much smaller percentage of those at a later worldcentric stage, and an even smaller percentage at a kosmoscentric stage. So, whether that’s in an organization in the USA, a community in Latin America, a neighbourhood in Europe, or in a city in West Africa – in all these social groups, the spread of stages are similar. In the above example from this work with a group of thirty leaders in civil society organizations in Nigeria, we found this to be verifiably the case. The same array of stages were present in this group as there would be in any group in North America or Europe: generally speaking, with a majority at a socio-centric stage, a smaller group at a world-centric stage, and an even smaller minority at a later kosmoscentric stage. This helps to avoid (or at least be more aware) of the oft-made errors by Northern development practitioners to assume that wealthy, educated means a ‘higher’ consciousness development when in fact that isn’t necessarily the case at all; consciousness grows and deepens through an array of conditions that support its developing complexity, which can be arrived at by anyone, anywhere, anytime. More to the point, in sustainable development, we should be identifying for those individuals who hold a later stage of consciousness wherever they are, and seeking to challenge and support them as leaders and catalysts of change.

"We have to give ourselves plenty of room to feel absolute perfection in everything that's arising. And yet [...] see one person starving and you will start crying so hard it will kill you. And if you're not doing both you're doing something wrong." (Wilber, 2005, <http://integrallife.com/video/hurts-more-bothers-you-less>).

This above description of engaging the transformations in consciousness development is only one side of the story. There is another side to this consciousness story in development, which makes up the second important way that integral practitioners work with consciousness in development.

According to the wisdom traditions³, the source of suffering is internal. Our attachment to outcomes or preferences that are not currently present, bring us to seek these in a future state, outside of the 'now.' This seeking binds us into a cycle of illusion (since the future doesn't yet exist), unable to rest with 'what is.'

This is a very different answer to human suffering than the field of international development has given. 'Development' as a professional field, has placed the locus of suffering externally, in unjust political systems, depressed economic systems, unfair international monetary arrangements, environmental pollution and lack of hygiene that negatively impact human health. In a conventional sense, it is sought to be alleviated through economic growth, through job creation, through improved health indicators, through greater infrastructure and educational systems, and so forth.

This is obviously not wrong, but it is very different to how the (particularly Eastern) wisdom tradition's wrangled with this human predicament of suffering. These traditions went in a different and deeper direction with their inquiry, seeing how the operation of the mind and of consciousness actually greatly influences how the world is perceived and how one's being relates to that world.

These teachings taught ways out of suffering that were predominantly internal. Shifting one's awareness to become liberated from the wheel of *samsara*, or cause and effect, through realizing the transitory nature of the separate self and identifying beyond it, to pure awareness. This comes about through a deep and profound practice that effects changes in one's consciousness. And such a shift in awareness allows for a freedom, a refuge, and a radical release on the other side of lack, pain, and fear. From that place, there is nothing that isn't already overflowing in wellbeing, there is nothing that need be 'developed', there's nothing that's not always already perfect.

As practitioners of an Integral approach, we see an important need to integrate these insights on

consciousness from the wisdom traditions and to practice upon our own consciousness to hold this spacious view as much and as often as possible in the very work of development. In fact, this can completely shift and even dissolve the concept of 'development.' That is, yes, we need an increasing complexity of levels of consciousness, especially in our leaders and in our social contracts, but we also need a way to settle our view more deeply, to see that 'development' of form is only one way to see wellbeing. Even with all the built structures and system supports through a greater (exterior) development, without this interior freedom gained through the profound practice upon one's own consciousness, there will still be suffering. The constant search and seeking for a better state takes one out of the 'now', binds one into a search for a desired future, which, the traditions say, is only an illusion.

So, as practitioners of an integral approach the other important way we include consciousness is in our very presence, our very understanding of our own minds, of the human condition, and the role that awareness plays in liberation from suffering. On the one hand, we work for the alleviation of suffering of all beings – seeing suffering as that which arises in exterior forms as hunger, thirst, lack of shelter, conflict, etc. as well as that which arises in an interior form as seeking, desire, fixation on something ultimately not real. And yet on the other hand, there is a Perfection to this moment, to this world just as it is, there is no suffering that need be alleviated. Holding that presence, even as we then paradoxically engage in the activities of a sustainable development, really changes the energy with which we work.

As Wilber says, this paradox is not one that has been solved, and perhaps isn't one to *be* solved. He says, "I don't know anybody who has simply resolved that. And I don't think you're supposed to, and I think the people that do are just playing on one side or the other side of that street." It our work in sustainable development, this is a paradox to be felt and lived: brought into each moment we regard suffering, and infused with our efforts to foster wellbeing.

The field of international development gives us ample moments in which to practice this paradox. Not only in the many moments of witnessing hardships, illness, economic inequalities, and other difficulties that people experience daily in developing countries. But also in the 'poverty' of a different sort in the affluent developed world, a poverty of awareness of these other realities and a poverty of collectivism and community in the hyper-individualized north. One cannot work in this field without all these sources of suffering to be

present and apparent. The other moment in which to practice this paradox arises from the fact that the field of development is inherently attuned toward what is to come next in a region, community, or area – attuned, that is, to development of a future state, not resting in the presence of this current state, this present Now. This orients practitioners into a future reality such that, often, they become prone to see the current reality as ‘not enough’ in one way or another, and thus become locked into a ‘seeking’ and ‘efforting’ mindset. This is exactly what the wisdom traditions suggest locks one *out* of the ever-present now, out of the spaciousness found in non-seeking and non-effort, and out of an awakened state.

Ken Wilber describes how this paradox gives rise to a state of being in which one is more and more sensitive to feel and be hurt by the pain and suffering of the world, and yet simultaneously less bothered by that pain. He says, ‘it hurts you more, but bothers you less.’ Using an analogy of a dream, he explains how: “So of course you want to work to alleviate suffering [...] but in the Absolute side [of this paradox], the analogy is if you’re in a dream at night and there are thousands of people starving, there are two ways you can stop their hunger. One is, in the dream, you can try to feed them all. And the second is you can wake up. And that will end their suffering immediately. But they’re both right, they’re both true.”

An integral approach to sustainable development has us deeply practicing these two dimensions. Honing our skills and abilities to engage in global issues, which would be akin to “trying to feed them all” in the quote above, as well as “waking up out of the dream” through the various spiritual practices or “consciousness practices” that can operate on and shift our awareness in ways that enable this wakeful action.

Integral practitioners across the board tend to have practices to support their holding of this paradox and to assist them in establishing a spacious holding of reality and graceful frame for making meaning of the world we live in. Practices that help them establish a view of the Absolute, be it through the spaciousness of meditation, devotion of prayer, or the expansiveness of yoga, any of the many ‘consciousness practices’ that encourage this paradoxical holding of both the Great Perfection as well as the ongoing search for greater wellbeing. In the example from the One Sky team in Nigeria, every person involved in that program – the designers, fundraisers, coordinators, facilitators, coaches, and participants – had some form of “consciousness practice” (some were overtly spiritual and others were more secular) ranging from yoga, meditation,

prayer, devotional practice, exercise or embodiment practices like dance, voice dialogue, Big Mind, and more. These were held personally and only some were rooted in spirituality or religion, but all were intended to support the practitioners’ ability to hold the tremendous energy that is present in this field of work. Not turning away from suffering, but rather directly engaging it, metabolizing it and making meaning of it in this paradoxical way described by Wilber. Ever ‘hurting more’ and yet somehow ‘bothered less.’

Speaking personally, as the years go by working in Africa, Latin America and Canada in situations of poverty and environmental degradation and fostering a sustainable development, I feel a sharper pain upon witnessing suffering and I am less and less able to turn away, yet all the while less bothered by it, as I am less convinced of our separate selves, less romanced by the illusion of the future, and more relaxed into the spaciousness of the heart.

And I can’t help but wonder and marvel about how this presence may in turn impact the peoples and communities we work with in different ways. Rather than bringing a striving and ‘efforting’ energy to a situation, would a practitioner who is holding this deeper presence feel different to others and engage differently as a result? Like homeopathic drops in a larger field of the collective, would this wakeful action have a different impact upon the world? I’d like to imagine that it would. Everyone knows that the drop is contained in the ocean, but not everyone knows that the ocean is contained in the drop, wrote the poet Kabir⁴. And perhaps every drop – every individual that engages this wakeful action – has an impact on that greater ocean of which it is a part.

CONCLUSION

The field of international development focuses on the grossest inequities and the starkest problems of our time. As integral practitioners in this field, at its essence, it is about the development and liberation of consciousness itself. With the research and rigor of the developmental psychologists who have studied and mapped the pathways of consciousness development in hand, we can now move further than ever before in laying the emergent ground for existing levels of consciousness to be enacted with greater wellbeing, and for new levels of consciousness to become embodied and established in self, behaviour, cultures, and systems. Yet, we humans remain part animal, part divine. We hang in that tension, working our consciousness to both grow and develop in form, as well as to release back into the formless Ground, where all that is arising simply is.

From that place of both developing into our fullness, and assisting all others to do the same, we also practice towards a freedom beyond seeking, beyond opposites, beyond form. That paradox of working towards both the development of consciousness as well as the liberation of consciousness in the field of international sustainable development becomes the signature of an integral practitioner. Though it is an unsolvable paradox, it is one that we simply can't turn away from. And in so doing, we can hope that it may bring our world just that much closer to a greater love, truth and beauty. ☉

¹ See www.integralwithoutborders.org.

² There are many other facets to this programme that I will not have the space to describe here, but more information can be found at www.onesky.ca.

³ Particularly those from the East, such as, Buddhism, Hinduism, and Kashmir Shaivism.

⁴ *A drop / Melting into the sea, / Everyone can see. / But the sea / Absorbed / In a drop – / A rare one / can follow!*

REFERENCES

- COOK-GREUTER, S. (1999). *Postautonomous ego development its nature and measurement*. Doctoral dissertation (Cambridge, MA: Harvard Graduate School of Education. UMI Dissertation Information Services UMI #9933122).
- (2002). *A detailed description of the development of nine action logics adapted from ego development theory for the leadership development framework*. Available at <http://www.cook-greuter.com/>.
- ESBJÖRN-HARGENS, S. & ZIMMERMAN, M. E. (2008). *Integral Ecology: Uniting Multiple Perspectives on the Natural World* (New York: Random House/Integral Books).
- GEBSER, J. (1985). *The Ever-Present Origin* (Athens: Ohio University Press).
- HOCHACHKA, G. (2009). *Developing sustainability, developing the self: An integral approach to international and community development* (Victoria, BC: Trafford).
- KEGAN, R. (1998). *In Over Our Heads: the Mental Demands of Modern Life* (Cambridge, MA: Harvard UP).
- KOESTLER, A. (1967, rep. 1990). *The Ghost in the Machine* (London: Penguin).
- LOEVINGER, J. (1976). *Ego Development* (San Francisco, CA: Jossey-Bass).
- O'BRIEN, K. AND HOCHACHKA, G. (2010). "Integral adaptation to climate change", *Journal of Integral Theory and Practice*, 5(1): 89–102.
- WILBER, K. (1985). *Up from Eden* (Boston: Shambhala).
- (1996). *A Brief History of Everything* (Boston: Shambhala).
- (1999). "An Approach to Integral Psychology", *The Journal of Transpersonal Psychology*, 31(2): 109–136.
- (2000). *Integral Psychology: Consciousness, Spirit, Psychology, Therapy* (Boston: Shambhala).
- (2000, 1995). *Sex, Ecology, Spirituality. The Spirit of Evolution*. (Boston & London: Shambhala).
- (2002). *Excerpt D: The look of a feeling. The importance of post/structuralism*. Retrieved July 31st, 2008 <http://www.wilber.shambhala.com/html/books/kosmos/>.
- (2000, 1996). *A brief history of everything* (2nd ed.) (Boston: Shambhala).



COHERENCE AS A CATALYST FOR PERSONAL, SOCIAL AND GLOBAL HEALTH, AND THE ROLE OF THE GLOBAL COHERENCE INITIATIVE

ROLLIN MCCRATY ~ ANNETTE DEYHLE



Rollin McCraty, PhD, of

Boulder Creek, California, has been with the Institute of HeartMath (IHM) since its creation in 1991, and is currently executive vice president and director of research. A psychophysiologicalist, Dr McCraty's research interests include the physiology of emotion, with a focus on the mechanisms by which emotions influence cognitive processes, behavior, and health. A fellow of the American Institute of Stress, McCraty is a member of the International Neurocardiology Network, American Autonomic Society, Pavlovian Society and Association for Applied Psychophysiology and Biofeedback. He and his team regularly participate in studies with scientific, medical and educational institutions worldwide, including Stanford University, Arizona State University, Wake Forest University, Clemson University and the Miami Heart Research Institute. His research has appeared in many journals, including the American Journal of Cardiology, Journal of the American College of Cardiology, Stress Medicine and Biological Psychology. Website: www.heartmath.org.

Annette Deyhle, PhD of Boulder Creek, California, is an internationally known geologist and marine geochemist. Deyhle, research coordinator for the Institute of HeartMath, has worked at various research centers in Europe and the US. She did her doctoral work at the Geomarine Research Center, GEOMAR, in Kiel, Germany. Prior to joining the Global Coherence Initiative (GCI) research team in late 2008, she had been at the Scripps Institution of Oceanography at the University of California, San Diego for five years. Her research there focused on fluid-rock interactions and the chemistry behind earthquakes; plate tectonics; and volcanism. Deyhle's work was the subject of numerous talks and articles in scientific journals, including *Geology*, *Earth and Planetary Science Letters*, *Chemical Geology and Marine Geology*. Deyhle, a member of the American Geophysical Union and the European Geosciences Union, writes science commentaries for the GCI Web site.

INTRODUCTION

MOST PEOPLE KNOW WHAT IT FEELS LIKE TO BE IN a harmonious state, the place where our hearts, minds and bodies are united in a feeling of wholeness and peace. This state

is often referred to as “being in the flow,” or “oneness”. We call this state of internal and external connectedness “*coherence*”. When we are in deeper states of coherence, we typically feel connected not only to our deepest selves but to others, our surroundings and the earth itself. What is coherence? The various concepts and measurements embraced under the term *coherence* have become central to fields as diverse as quantum physics, cosmology, physiology, and brain and consciousness research^[1]. Coherence has several related definitions, all of which are applicable to the study of human physiology, social interactions, and global affairs. The most common dictionary definition is “the quality of being logically integrated, consistent, and intelligible,” as in a coherent statement. A related meaning is the logical, orderly, and aesthetically consistent relationship among parts^[2]. Coherence always implies connectedness, consistency, correlations, and efficient energy utilization. We refer to people's speech or thoughts as coherent if the words fit together well and incoherent if they are uttering meaningless nonsense or presenting ideas that make no sense as a whole. Thus, coherence refers to wholeness and global order, where the whole is greater than the sum of its individual parts. In the example of organizing words into a coherent sentence, the meaning and purpose conveyed by the arrangement of the words is greater than the individual meaning of each word^[1]. For any system to be functional, it must have the property of global coherence, and this is also true for our physical, mental, emotional, and social systems. Not only is individual coherence highly beneficial, but we hypothesize that due to an interconnected field, individual coherence can also extend outward and increase social and global order. Because we are at a critical turning point in our history, were the development of society and consciousness is lagging behind our technological and scientific advancement, the Global Coherence Initiative (GCI) was brought to life by the Institute of HeartMath, a non-profit organization, in 2008. The goal of the Global Coherence Initiative is to help facilitate a positive shift of global consciousness, from stress, instability and discord to balance, cooperation and enduring peace. GCI is a science-based, co-creative project, to unite people in heart-focused care and

intention (www.glcoherence.org). In the following, the concept of coherence and the research goals of GCI will be discussed.

PERSONAL, SOCIAL AND GLOBAL COHERENCE

PERSONAL COHERENCE

The term *physiological coherence* describes the degree of order, harmony, and stability in the various rhythmic activities within living systems over any given time period. This harmonious order signifies a coherent system whose efficient or optimal function is directly related to the ease and flow in life processes. By contrast, an erratic, discordant pattern of activity denotes an incoherent system whose function reflects stress and inefficient utilization of energy in life processes. The Institute of HeartMath specifically researched the role of the heart in coherence and found coherent heart rhythms when an individual feels positive emotions. Positive emotions, such as appreciation and compassion, as opposed to negative emotions, such as anxiety, anger and fear (see FIG. 1)

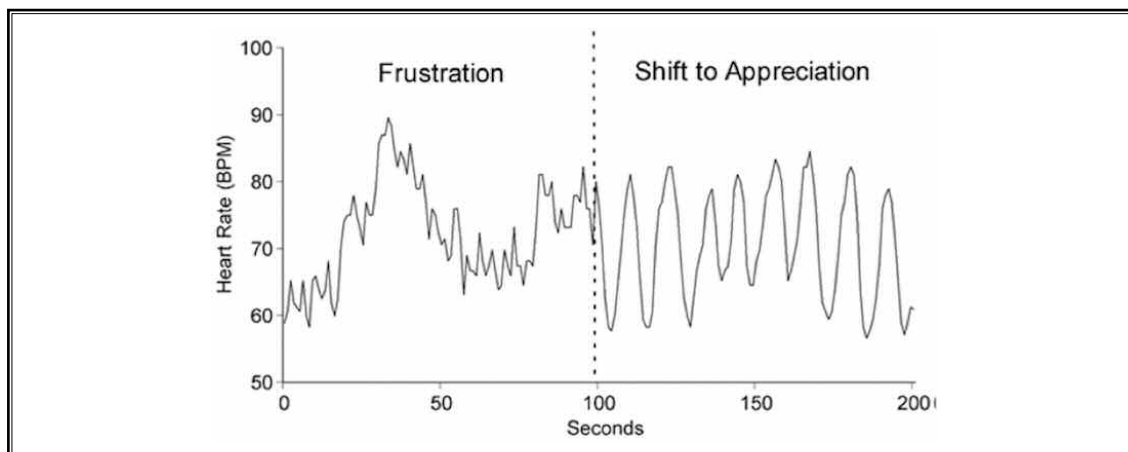


FIG. 1 – The heart rate variability pattern shown on the left side of the graph is characterized by its random, jerky form, and is typical of feelings of anger or frustration. Sincere positive feeling states like appreciation (right) can result in highly ordered and coherent HRV patterns, generally associated with enhanced cardiovascular function.

Physiological coherence, also referred to as heart coherence, cardiac coherence, or resonance, is a functional mode measured by heart rate variability (HRV) analysis wherein a person's heart rhythm pattern becomes more ordered and sine wave-like at a frequency of around 0.1 Hz (10-seconds)^[3]. The term *physiological coherence* is associated with increased order, efficiency, and harmony in the functioning of the body's systems. When one is in a coherent state, one experiences increased synchronization and resonance in higher-level brain systems and in the

activity occurring in the two branches of the ANS, as well as a shift in autonomic balance toward increased parasympathetic activity. Psychologically, coherence reflects increased emotional and perceptual stability and alignment among the physical, cognitive, and emotional systems (FIG. 2).

HRV is widely considered a measure of neuro-cardiac function that reflects heart-brain interactions and autonomic nervous system (ANS) dynamics. All HRV measures are derived from the assessment of the naturally occurring changes in beat-to-beat heart rate. HRV is much more than an assessment of heart rate since it reflects the complex interactions of the heart with multiple body systems. An optimal level of variability within an organism's key regulatory systems is critical to the inherent flexibility and adapt ability or resilience that epitomizes healthy coherent function and well-being. While too much instability is detrimental to efficient physiological functioning and energy utilization, too little variation indicates depletion or pathology.

The amount or range of overall HRV is related to our age, with younger people having higher levels than older ones. Low HRV is a strong and independent predictor of future health problems, including all causes of mortality, and it is associated with numerous medical conditions^[1].

ESTABLISHING A NEW BASELINE OF INCREASED COHERENCE

Shifting a system from an old pattern into a more coherent mode requires effort and energy, especially

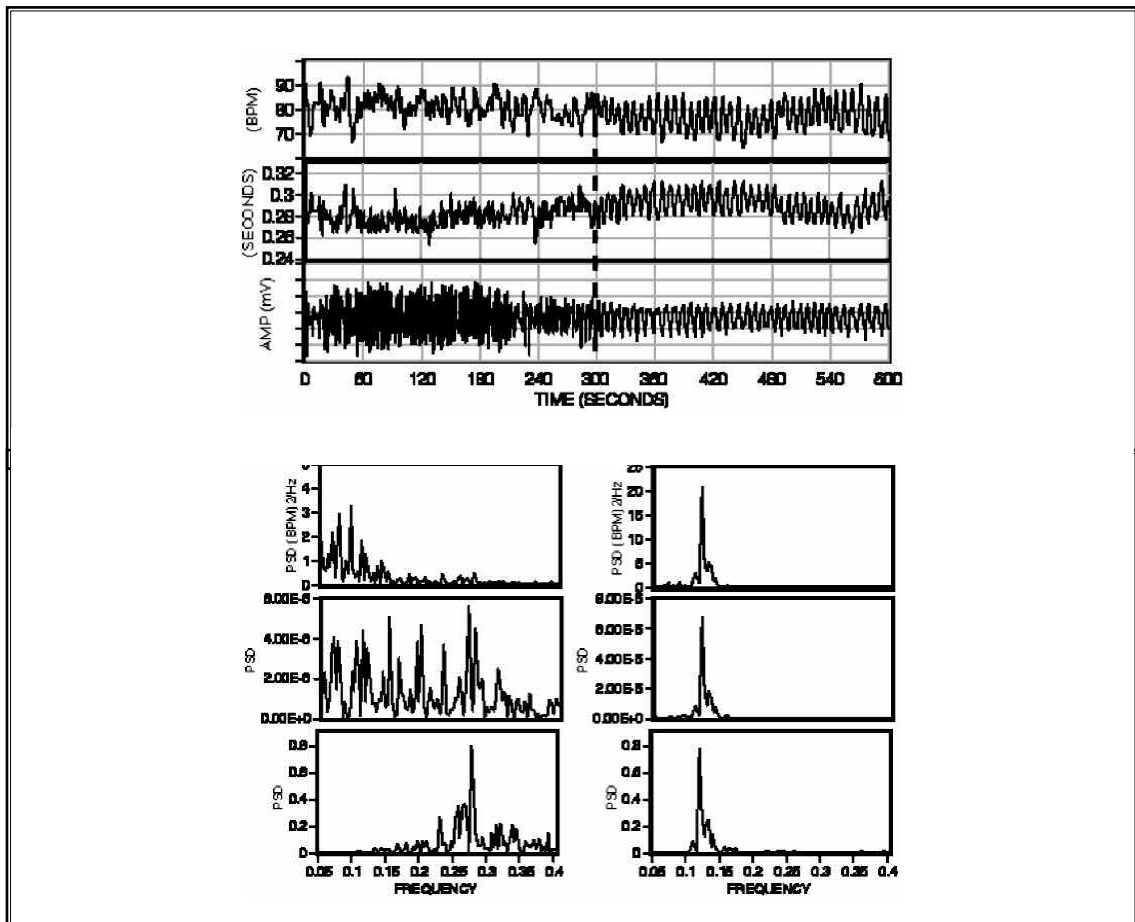


FIG. 2 - Entrainment. The top graphs show an individual's heart rate variability, pulse transit time, and respiration rhythms over a 10-minute period. At the 300-second mark, the individual used the Freeze-Frame positive emotion refocusing technique, causing these three systems to come into entrainment. The bottom graphs show the frequency spectra of the same data on each side of the dotted line in the center of the top graph. Notice the graphs on the right show that all three systems have entrained to the same frequency.

when first becoming familiar with a new state. It also takes energy to overcome the inertia of the well-established emotional patterns, stress responses and HRV baseline modes. However, there is evidence that the on-going practice of coherence-building techniques facilitates a *restructuring process* in the neural architecture where coherence becomes established as a new, stable baseline reference or norm. Self-regulation of emotions and stress responses then becomes increasingly familiar and, eventually, automatic^{[4],[5],[6]}. This makes it easier for individuals to maintain their “centre” which increases their mental and emotional flexibility and capacity to remain in charge of themselves. Such flexibility and coherence can dramatically reduce stress related energy drains during day-to-day activities, even in more stressful or challenging situations.

IMPROVED HEALTH AND OTHER BENEFITS OF INCREASED COHERENCE

Not only do individuals learn to keep more in their centre during challenging situations. Coherence-training also has another substantial health benefits. The use of interventions utilizing the HM self-regulation techniques and HRV coherence feedback technology to reduce stress has significantly improved key markers of health and wellness. These include: immune function^{[7],[8]}, ANS function and balance^{[9],[10]}, and significant reductions in stress hormones^[11]. Several workplace studies with employees with hypertension showed significant reductions in Blood Pressure (BP) and a wide range of stress measures^[6], such as reductions in total cholesterol, glucose, as well as significant reductions in overall stress, anger, fatigue, depression and hostility. The positive outcome is an increase in caring, contentment, gratitude, peacefulness, resilience and vitality have been measured across diverse populations^{[12],[13-17]}. Most

people report that when they are in the coherent state, they experience a sense of connectedness with their heart intuition, greater clarity on troublesome issues, a reduction in inner “mental noise” associated with stress, and a deeper sense of well-being.

Studies also showed that academic performance, and cognitive functions were improved through HM self-regulation techniques combined with HRV coherence feedback^[3,18,19]. One study found that being in a state of coherence for 5 minutes prior to a discrimination task produced a *six fold* greater improvement in performance than the performance fluctuations typically observed within a single cardiac cycle. Furthermore, a study in the US, test anxiety was significantly reduced in high school students and higher test scores were observed^[20]. In a UK study that directly assessed cognitive performance there was a wide range of significant improvements in middle school students with clinically diagnosed with attention-deficit hyperactivity disorder^[19]. Also soldiers at a VA facility, who had recently returned from Iraq and were diagnosed with PTSD, showed improvements in cognitive functions, especially in the ability to self-regulate and inhibit negative responses, which again correlated with coherence measures^[18].

HOW TO INCREASE COHERENCE

Within each individual, the level of stress and degree of global and heart coherence fluctuate from day to day, as does the quality of our thoughts and emotions^[9]. In varied ways we all strive to increase ease and flow in our lives and decrease the chaos within and around us. Many are intuitively aware of the interconnections between our thoughts, emotions and physical processes and make conscious efforts to increase personal, social and global balance and coherence through such activities as prayer, meditation, and focused intentions. However, a good portion of people’s meditation or prayer time is often spent trying to calm down, get focused and quiet the mind, leaving little time and energy for reflective insight^[1].

A series of tools and techniques, collectively known as the HeartMath (HM) System, were developed by Doc Childre and his associates at the Institute of HeartMath to provide a systematic process that enables people to shift into the coherent state, increase their resiliency and ability to better self-regulate stress and improve performance^[21-23]. Many of these techniques include the intentional generation of a heart-felt positive emotional state combined with a shift in attentional focus to the area of the heart (where many people subjectively experience positive emotions). This shift in feeling allows the coherence mode to emerge naturally and helps to reinforce the inherent

associations between physiological coherence and positive feelings.

Paced breathing at a 10 second rhythm (0.1Hz) is a common approach to inducing a physiologically coherence state^[24]. This is because we have conscious control over our breathing rate and depth and can therefore use it to modulate the heart rhythm and induce coherence. When we use breathing to help shift into the coherent state, it changes the afferent neural patterns sent to the brain centers that regulate autonomic out-flow, emotion, and cognitive processes^[3]. Thus, breathing exercises are effective primarily due to the modulation of the heart’s rhythmic patterns. While rhythmic breathing methods are an effective way to induce heart rhythm coherence, cognitively-directed paced breathing is difficult for many people to maintain. Most can do so for about one minute before it becomes uncomfortable and distracting. In our laboratory at the HM research center we have found that when people are able to activate a heart-felt positive emotion rather than focusing on a specific breathing rhythm, they typically enjoy the experience more and are able to maintain coherence for extended periods. However, some individuals, especially those who are first learning the self-regulation techniques, cannot make the shift into coherence by activation of a positive emotion alone. In these instances, paced breathing is an effective way to facilitate the shift, and for this reason the HM techniques include a heart-focused breathing component combined with the activation of a positive feeling.

SOCIAL COHERENCE

Social coherence pertains to groups, families, work groups, organizations, sport teams, and a network of relationships among individuals who share common interests and objectives. Social coherence is a recognized sense of a larger integrity, unity or wholeness amongst individuals. It results in a collective intelligence, where a larger picture than one’s own is taken in consideration, which emerges from understanding the different needs, roles, interests, abilities and positions in the group setting.

Social coherence is reflected as a stable, harmonious alignment of relationships which allows for the efficient flow and utilization of energy and communication required for optimal collective cohesion and action^[25]. There are of course cycles and variations in the quality of family, team or group coherence, similar to variations in an individual’s coherence level. Coherence requires that group members are attuned and emotionally aligned, and that the group’s energy

is globally organized and regulated, by the group as a whole^[25]. There are obvious benefits to interacting and working with individuals who have a high level of personal coherence. When members of any work group, sports team, family or social organization get along well there is a natural tendency towards good communication, cooperation and efficiency. One of the main sources of stress and incoherence stems from communication problems with co-workers, family members or teammates. When individuals maintain relationships over extended periods, a “surface level” of cooperation and harmony usually develops wherein people are basically civil and cooperative. This can be considered the basic functional level of coherence necessary for a group to endure and accomplish goals. There is a feedback loop between the individuals in any group and the group’s level of coherence. When individuals are not well self-regulated or are acting in only their own best interests without regard to others, it generates social incoherence. Stressful or discordant conditions in a given group act to increase emotional stress among its members. Unfortunately, social incoherence is characterized by a lack of unity, common purpose, peace and harmony, in or among families, neighbors or employees in workplace environments^[26]. Consequently, the need for mental and emotional self-management and high quality social coherence is greater now than ever. Various organizations have found that interventions providing stress and emotional self-regulation skills combined with heart rhythm coherence training, result in improved workplace communication, satisfaction, productivity, innovative problem solving and reduced employee turnover which can translate into a significant return on investment, not only financially, but socially^[27].

HOW TO CREATE HIGH SOCIAL AND GROUP COHERENCE

Anyone who has watched a championship sports team or experienced an exceptional concert knows that something special can happen in groups that transcend their normal performance. It seems as though the players are in sync and communicating on an unseen energetic level. A growing body of evidence suggests that an energetic field is formed between individuals in groups through which communication among all the group members occurs simultaneously. Research conducted in the laboratory of the Institute of HeartMath has confirmed the hypothesis that when an individual is in heart coherence, the heart radiates a more coherent electromagnetic signal into the environment, which can be detected by nearby animals or the nervous systems of other people^[28]. Of all the organs, the heart generates the largest rhythmic electromagnetic field, one

that is approximately 100 times stronger than that produced by the brain^[29]. This field can be detected several feet from the body with sensitive magnetometers^[11]. This magnetic field provides a plausible mechanism for how we can “feel” or sense another person’s presence and emotional state, independent of body language, or other factors^[30]. We have found that there is a direct relationship between the heart rhythm patterns and the spectral information encoded in the frequency spectra of the magnetic field radiated by the heart. Thus, information about a person’s emotional state is encoded in the heart’s magnetic field which is communicated throughout the body and into the external environment^[11]. In essence, it appears that a bio-energetic communication system may indeed exist which serves to *in-form* function and behavior in highly coherent groups. Further support for this hypothesis is provided in a study examining the possibility that people trained in achieving high states of heart coherence could facilitate coherence in other people in close proximity. The results showed that the coherence of untrained participants was indeed facilitated by others who were in a coherent state. The authors concluded that “evidence of heart-to-heart synchronization across subjects was found which lends credence to the possibility of heart-to-heart bio-communications.”

GLOBAL COHERENCE

The much anticipated year 2012 is here now. Many predictions have been made, and we will have the great opportunity to both witness, and co-create the remaining year of 2012. How can we, as a global community contribute to a positive shift of events and participate in creating a global coherence?

The convergence of several independent lines of evidence provides strong support for the existence of a global information field that connects all living systems and consciousness. Humans are embedded within social networks on the earth and we are part of the earth, which in turn is part of the solar system. Every cell in our body is bathed in an external and internal environment of fluctuating invisible electro-magnetic forces that can affect virtually every circuit in our biological systems. When Earth’s orbit and solar flares intersect, many disruptions are experienced and life and the electro-magnetic potential of Earth vary with solar activity. In turn, alternating electro-magnetic fields, like those generated by geomagnetic storms, change the bioelectromagnetic rhythms in humans. Therefore, it should not be surprising that human physiological rhythms, health, behaviour and global scale events are synchronized with solar and geomagnetic activity^[31,32], and disruptions in these fields can create adverse effects on human health and

behaviour. Solar activity, geomagnetic activity and weather are correlated to changes in blood pressure, blood composition and the physical and chemical state of humans, causing higher rates of depression, heart attacks and deaths. The most likely mechanism for explaining how solar and geomagnetic influences affect human health and behavior are a coupling between the human nervous system and resonating geomagnetic frequencies, called Schumann resonances and Alven Waves, which occur in the earth-ionosphere resonant cavity. It is well established that these resonant frequencies directly overlap with those of the human brain and cardiovascular system.

The influence of the sun is not only reflected in individual and group biologic and emotional systems, but in natural, social and political systems as well. Also, human aggression, as seen in national and international conflicts, terrorist attacks and wars, occur in cycles that can be linked to solar and geomagnetic activity. Historically, cultures such as the Egyptian, Hopi, Ancient Indian, and ancient Chinese believed that their collective behavior could be influenced by the sun. The first scientific evidence of this belief was provided by Alexander Tchijevsky, a Russian scientist who noticed that more severe battles during WWI occurred during peak sunspot periods. He conducted a thorough study of global human history and constructed an index of Mass Human Excitability dating back to 1749 which he then compared to the solar cycles over this time period^[33] (FIG. 3).

Since his pioneering work, energetic influxes from solar and geomagnetic fields have been associated with numerous aspects of human health and

wellness, both positive and negative^[32,34,35]. The scientific community and the media tend to focus on such negative correlations, such as societal conflicts, crime, terrorism, traffic accidents, mortality from heart attacks and strokes etc. However, also the greatest levels of human flourishing occur during these cycles^[36]. The Global Coherence Initiative (GCI) focuses on examining the interactions between humans and the earth's energetic fields^[37]. One of the projects hypotheses is that the earth's magnetic and geomagnetic fields created in the ionosphere in turn create a bidirectional feed-forward and feedback loops with the collective emotional energy of humanity. More and more people are realizing that solar and universal energetic influxes are part of a natural cycle with potential benefits to humanity. If all living systems are indeed interconnected and communicate with each other via biological, electromagnetic and non-local fields, increased individual coherence helps to create co-creative relationships that consciously increase the social coherence which enhances the global coherence in the global field environment, which in turn distributes this information to all living systems within the field (see FIG. 4).

GOALS AND HYPOTHESES OF THE GLOBAL COHERENCE INITIATIVE

Considering all the above mentioned research, the Global Coherence Initiative was created to help in the

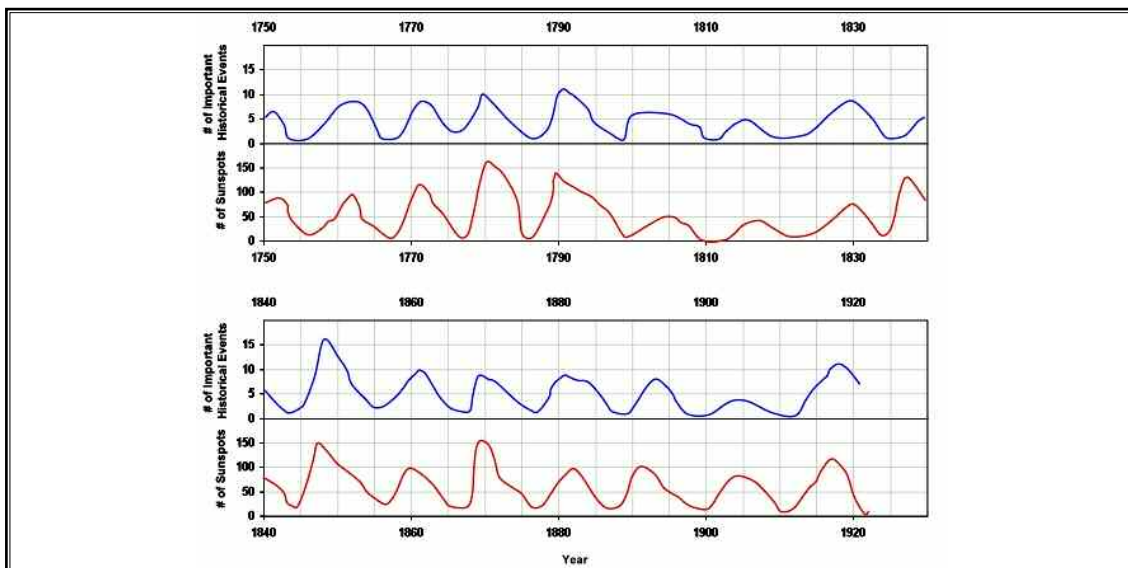


FIG. 3 - This figure shows Tchijevsky's original data. The blue line plots the yearly number of important political and social events such as the start of a war, social revolutions, etc. while the red line plots the solar activity as indicated by the number of sunspots from 1749 to 1922. The histories of 72 countries were compiled and it was found that 80% of the most significant events occurred during the solar maximum which correlates with highest periods of geomagnetic activity.

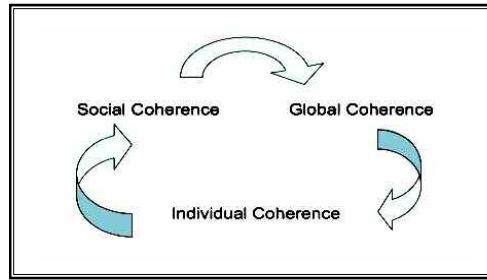


FIG. 4 ~ Global Coherence Initiative Theory of Change. Feedback Loop Starting with Individual Coherence feeding Social Coherence feeding Global Coherence, feeding Individual Coherence

global shift of consciousness. GCI focuses on examining the interactions between humans and the earth's energetic fields^[37]. This project has been initiated because millions of people sense that this is an extraordinary time; that a paradigm shift of human consciousness is under way; that we are at the crossroads of change and must move toward finding a new balance in ourselves, the global community and with our planet. Many people are feeling a strong desire to help change our present and future conditions and are looking for ways to use their hearts intelligence, wisdom, service, skills and care to make a meaningful difference in the world.

GCI has following goals:

- to help individuals and groups work together, synchronistically and strategically to increase the impact of their efforts to create positive global change;
- provide tools and techniques to increase personal coherence for the benefit of ourselves and the planet;
- increase positive social interactions, connection and harmony. Help shift the planetary consciousness baseline from self-centeredness to wholeness and care;
- monitor global events to determine where GCI members' collective heart-coherent prayers, meditations, affirmations and intentions can be directed;
- empower people's ability to navigate through global changes with less stress and more ease;
- empower stewardship of the planet and environmental responsibility.

GCI's main hypotheses are:

- 1 - The first overarching hypothesis of the GCI is that all living systems are interconnected at an energetic level and communicate with one another via biological (bioelectromagnetic) and geoelectromagnetic fields, which act at both local and non-local levels).
- 2 - The second hypothesis is that human health and behaviours are affected by planetary energetic fields.

- 3 - Conversely that Earth's energetic fields are also influenced by and act as a carrier wave for collective human emotions and consciousness (positively or negatively). Thus, much of the planetary "information field environment" is made up of the collective consciousness of the inhabitants.

- 4 - Large numbers of people, when coherently aligned will generate a coherent standing wave that can encode biologically relevant information on the earth's geomagnetic and energetic fields.

- 5 - Embedded within the above four hypotheses, is a related hypothesis that the earth's energetic fields, in effect, links all living systems and gives rise to a form of collective consciousness. Thus, a feedback loop exists between all human beings and the earth's energetic systems.

The intention of GCI is to be a catalyst that will instigate, facilitate, and support the maintenance of an upward spiral of this feedback loop, for the mutual benefit of human beings and the planet we call home. To support these efforts GCI has established an international web-based membership of individuals which of mid 2012 has over 44,000 members (see www.glcoherence.org). GCI is also working with various partner groups and organizations committed to increasing planetary consciousness and coherence.

THE GLOBAL MONITORING SYSTEM

In order to carry out the scientific research on the above mentioned hypotheses, a current focus of the initiative is the deployment of the Global Coherence Monitoring System to measure fluctuations and resonances in the earth's magnetic field and the resonances created in the earth / ionosphere cavity. The intention is to install a global network of 12 to 14 sensor site strategically located around the planet (see FIG. 5).

As of the beginning of 2012, three sites, one at the Heart-Math Research Center in northern California, one in the eastern province of Saudi Arabia and one in southern England are operational. Three additional sites are

in the process of being installed in 2012, one in New Zealand, Canada and South Africa. Each monitoring site detects and sends the local alternating magnetic field strengths in three dimensions over a relatively wide frequency range (0.01 to 300 Hz) while maintaining a flat frequency response. The data acquisition infrastructure

common emotional significance is reflected in the activity of the earth's magnetic field and ionosphere.

5 ~ Determine if changes in the earth's geomagnetic field and ionosphere occur prior to natural catastrophes such as earthquakes, volcanic eruptions, floods, storms, etc.

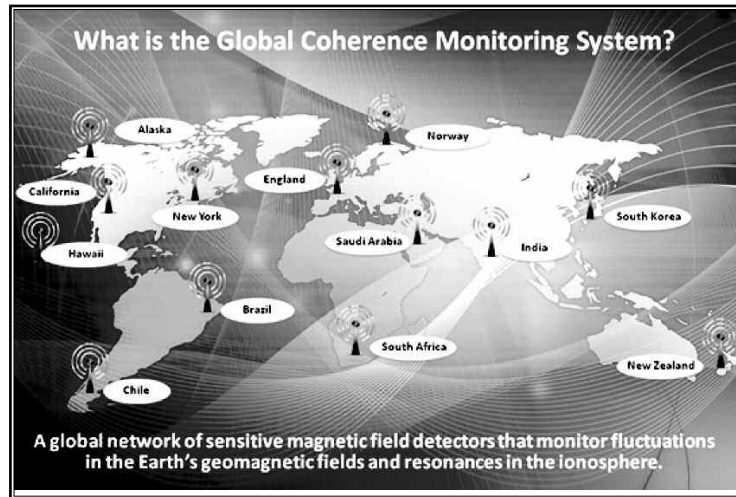


FIG. 5 ~ Proposed locations for the global network of monitoring sites specifically designed to measure the magnetic resonances in the earth/ionosphere cavity, and resonances that are generated by the vibrations of the earth's geomagnetic field lines as well as ultra-low frequencies that occur in the earth's magnetic field.

captures, GPS time-stamps, and transmits the data to a common server. In addition, each site has random number Generator that is part of the Global Consciousness Project network.

THE PURPOSE OF THE GLOBAL MONITORING SYSTEM IS TO:

- 1 ~ Enable research on the mechanisms of how the earth's geomagnetic field and resonances in ionosphere (like Schumann resonances (SR) and magnetic pulsations) affect human mental and emotional states as well as health and behaviour.
- 2 ~ Examine the degree to which there is an energetic resonance between the earth's magnetic field, SR and other frequencies in the ionosphere and the rhythms of human heart and brain activity.
- 3 ~ Explore the influence of the earth's geomagnetic field/ionosphere on patterns of collective human emotionality, and mass behaviours (either positive or negative) such as peace movements, social change or unrest, crime, hospital admissions, etc.
- 4 ~ Examine the degree to which collective human emotional resonance in response to mass events of

6 ~ Provide early warning to the society at large in order to help prevent and reduce impact of geomagnetic/ionospheric disturbances.

We believe the Global Coherence Monitoring System can facilitate a better understanding of the mutual interactions between humans and our global field environment. It is anticipated that by investigating how individual and collective emotional energy is affected by and may affect the earth's fields that it will facilitate a growing awareness of humanity's interdependence with the earth and with each *other*. There is evidence in some cases that people's brainwaves can synchronize with the rhythm of the electromagnetic waves generated in the earth's ionosphere. When people say they "feel" an impending earthquake or other planetary events, such as weather changes, it is possible that they may be reacting to the actual physical signals that occur in the earth's field prior to the event. *It's interesting to note that* changes in geomagnetic conditions affect the rhythms of the heart and brain more strongly than other physiological functions studied so far.

While it is not difficult to conceive that life-forms embedded in the earth's magnetic fields could be affected by modulations in these fields, *it is a more*

far-reaching proposition to suggest that the earth's fields can be influenced or modulated by human emotions.

RESEARCH ON COLLECTIVE CONSCIOUSNESS

While the field of collective consciousness research is still in its infancy, some research has been carried out. For example, Michael Persinger, a well-known Neuroscientist at Laurentian University in Ontario Canada, conducted numerous studies examining the effects of magnetic fields with the same magnitude as the geomagnetic field on brain functions^[38,39]. Not only has he shown that by applying external fields similar to the Schumann Resonances altered states of consciousness can be induced, he has also

a globally correlated manner. The research conducted by GCP has found that there is a significant correlation between global events that elicit a high level of emotionality from a large part of the world's population and periods of non-random order, generated by the RNGs^[42]. For example, multiple independent analyses of the network during the terrorist attacks that took place in the United States on the morning of September 11, 2001 (FIG. 6) correlate with a large and significant shift in the output of the global network of random number generators^[43]. The mechanisms for why human emotions create more coherence in the randomness of this global network are not yet fully understood, however the data clearly shows that

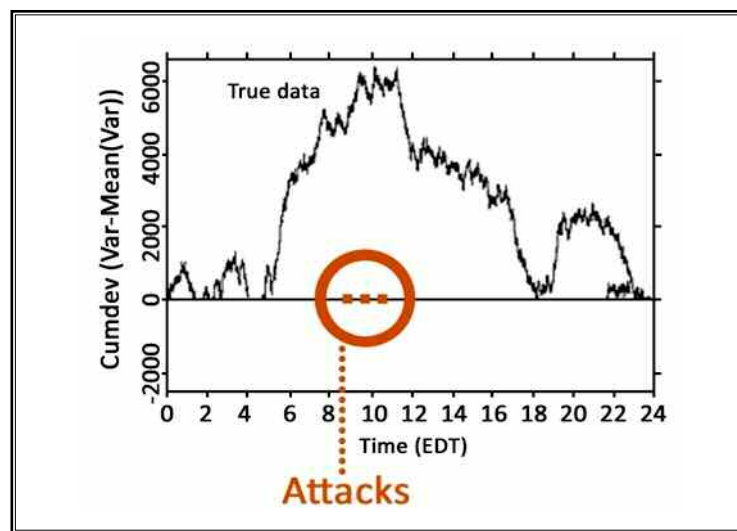


FIG. 6 - The graph shows the shift in correlated output of a global network of Random Number Generators during the terrorist attacks on September 11, 2001.

suggested in a detailed theory that the space occupied by the geomagnetic field can store information related to brain activity and that this information can be accessed by the human brain^[40]. Furthermore, Persinger suggests that the earth's magnetic field can act as a carrier of information between individuals and that information rather than the signal intensity is important for interaction with neural networks^[41]. There is a substantial body of evidence indicating an interaction between human emotions and global fields when large numbers of people have similar emotional responses to events or organized global peace meditations. Research conducted by the Global Consciousness Project (GCP), which maintains a worldwide network of random number generators, has found that human emotionality affects the randomness of these electronic devices in

they do have such affects and data now has an odds against chance ration of over a billion to one^[44].

MASS EMOTIONAL RESPONSES AND THE GEOMAGNETIC FIELD

Another line of evidence for a human emotional energy interacting with earth's energetic fields was provided from measures of the Earth's geomagnetic field during the 9/11/01 terrorist attacks. FIGURE 7 shows data recorded from two separate space weather satellites in geosynchronous orbit in the days before and after the attacks.

The data from the magnetometers on these two satellites, which are positioned over the east and west coasts of the US, reveal that a large shift occurred in the Earth's geomagnetic field at the same time as the attacks. Also note the difference in the fields in the days before and after the attacks. The incoherence

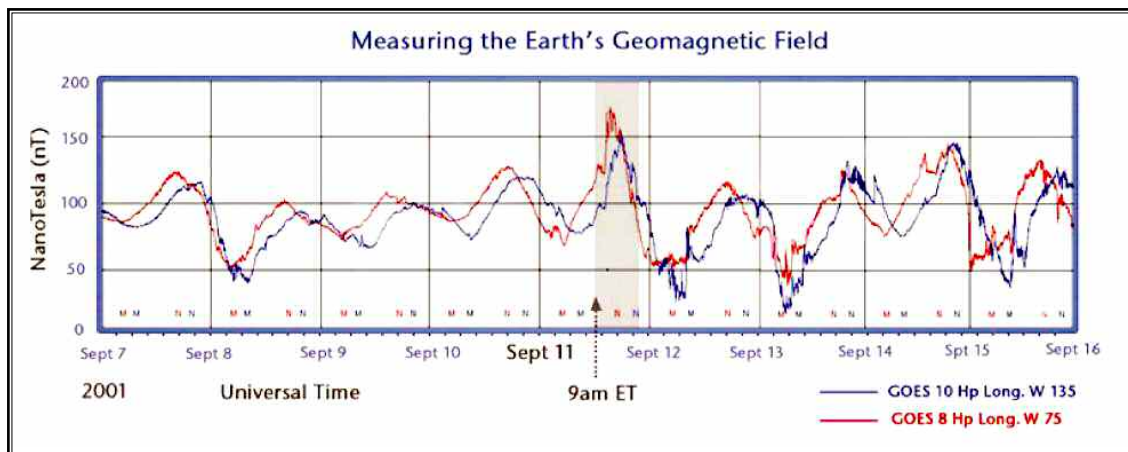


FIG. 7 - The data recorded from the GOES 8 and 10 weather satellites in geosynchronous orbit over the East and West Coasts of the US in the days before, during and after the 9/11/01 terrorist attacks.

and discord in the fields during the days after the attacks may reflect the mass emotional turmoil that occurred as news of the attacks spread around the globe. The same patterns were also observed in ground based magnetometers. Although the data shown in FIG. 8 does not prove that human emotion modulated the earth's geomagnetic field, it, combined with the GCP and other data, supports the hypothesis that the earth's energetic systems are coupled with and exchange information in a bidirectional manor with the collective emotional energy of humanity.

PRELIMINARY RESULTS FROM
GCI INTERCONNECTEDNESS
STUDY AND ONGOING
RESEARCH

During a pilot study carried out by GCI in 2010, 1,643 GCI members from 51 countries completed a biweekly survey at random times six days each week over a six month period. The survey contained six valid scales: positive affect, well-being, anxiety, confusion, fatigue and physical symptoms. The survey data was subjected to correlation analysis with a number of planetary and solar activity variables such as solar wind speed, magnetic field and plasma data, measures of energetic protons, solar flux, and geomagnetic activity indices. For example, the results showed, that when solar wind speed, increased and the geomagnetic field was disturbed, the level of fatigue, anxiety and mental confusion increased^[1]. The study also uncovered some unexpected findings. For example, the solar radio flux index was correlated with reduced fatigue and improved positive affect, indicating that there are mechanisms

affecting human well-being that are not fully understood and additional research needs to be conducted in order to understand the effects of the various variables and the time sequence of their effects^[45].

Another study with the Prince Sultan Cardiac Hospital in Saudi Arabia, titled, *Effects of changes in Geomagnetic and Ionospheric Fields on Human Heart Rate Variability* recently began to more rigorously test the hypothesis that Schumann resonances and field line resonances are primary mechanisms mediating the interactions between geomagnetic activity and the human nervous system. This study has two major components. First, sequential, 24-hour heart rate variability or HRV recordings will be obtained each day over a one-year period. Changes in the participants HRV data will be correlated with variations in planetary and solar activity, including solar wind speed, magnetic field, plasma data, protons, geomagnetic activity indices like AE, Dst, Kp, solar radio flux (F 10.7 index), locally recorded Schumann resonances (SR) and geomagnetic field line resonances. It is expected that we will find strong correlations between increased solar activity, geomagnetic activity and SR intensities and disturbances. It is also expected that we will find that the SR intensities and disturbances have strong correlations with changes in the participants HRV indices, especially with changes in the VLF rhythms of HRV. The second aspect of this study involves studying the impact of solar and geomagnetic activity on a societal level. Solar and geomagnetic variables will be examined along with the local population's social and physical health parameters, derived from hospital admissions and traffic accidents, as well as social unrest. If the hypothesis can be validated, it will significantly increase our understanding of the mechanisms by which geomagnetic disturbances affect human health and behavior and thus

significantly increase our ability to predict and take steps to counteract the impact of energetic disturbances on individuals and society.

Ongoing data analysis of the worldwide magnetometer network is planned, also to be able to gain a better understanding of global-scale events.

HOW TO CREATIVELY USE THE INCOMING ENERGY DURING SOLAR CYCLE 5 TO INCREASE THE GLOBAL COHERENCE IN THE PLANETARY FIELD ENVIRONMENT

The idea that shared intentions can influence others at a distance is not new, and numerous studies have looked at the effects of prayer, meditations and groups sending intentions in various experimental contexts^[46-49]. For example, a peace study conducted by John Hagelin, on the *Power of the Collective* concluded that: “Since meditation provides an effective, scientifically proven way to dissolve individual stress, and if society is composed of individuals, then it seems like common sense to use meditation to similarly diffuse societal stress^[50]. A study conducted in 1993 in Washington DC with 2500 meditators participating, showed a 25% drop in crime rate during the time frame the meditations were carried out^[51]. So a relatively small group of a few thousand was influencing a much larger group – a million and a half. The question posed itself, that when crime rate could be decreased, could a group of meditators also influence social conflicts and wars? A similar experiment was done during the peak of the Israel-Lebanon war in the 1980s. Drs. Charles Alexander and John Davies at Harvard University organized groups of experienced meditators in Jerusalem, Yugoslavia and the US, to mediate on the area at various intervals over a 2¼ year period. After controlling statistically for weather changes, Lebanese and Muslim, Christian and Jewish holidays, police activity, fluctuation in group sizes, and other variant influences, during the course of the study, the levels of violence in Lebanon decreased between 40 to 80 percent each time a meditating group was in place with the largest reductions occurring when the number of meditators were largest. During these periods the average number of people killed during the war per day dropped from twelve to three, a decrease of more than 70 percent; war-related injuries fell by 68 percent; and the intensity level of conflict dropped by 48 percent^[52].

Interestingly, but not surprisingly, Tchijevsky’s findings also apply to the current Solar Cycle 24. Social unrest and uprising has increased in many countries. For example, the Occupy movement which started in the US, spread to many countries throughout the world and is still ongoing. Also, social unrest that toppled regimes in Tunisia, Libya and Egypt happened in a relatively short time period. The

solar cycle is probably going to peak in 2013, so continued energy influx can be expected for the near future.

However, it’s important to remember that increased solar activity can have a positive impact and used creatively as well. Our global financial and economic situation is in a dramatic shift, government leaderships are in transition, banking and corporate leaders are resigning, and weather patterns are unpredictable. However, it is important to know our own power in steering through this time of changes. Suitbert Ertel, a German professor, found an increase in human creativity in art, science and architecture during periods of increased solar energy^[36]. Solar activity has not only been associated with social unrest, it has also been related to the periods of greatest human flourishing with clear spurts in architecture, arts and science and positive social change^[36]. When old structures which do not serve humanity collapse, an opportunity opens for them to be replaced with more suitable and sustainable models. Such positive change can affect the political, economic, medical, educational systems, as well as relationships of individuals at work and home and in communities. At times of such pertinent energy influx we have the greatest opportunity to instate positive change in our world. We can learn from past mistakes and consciously choose new ways of navigating energy influxes to create periods of human flourishing and humanitarian advances. We can change the course of planetary events.

CONCLUSION

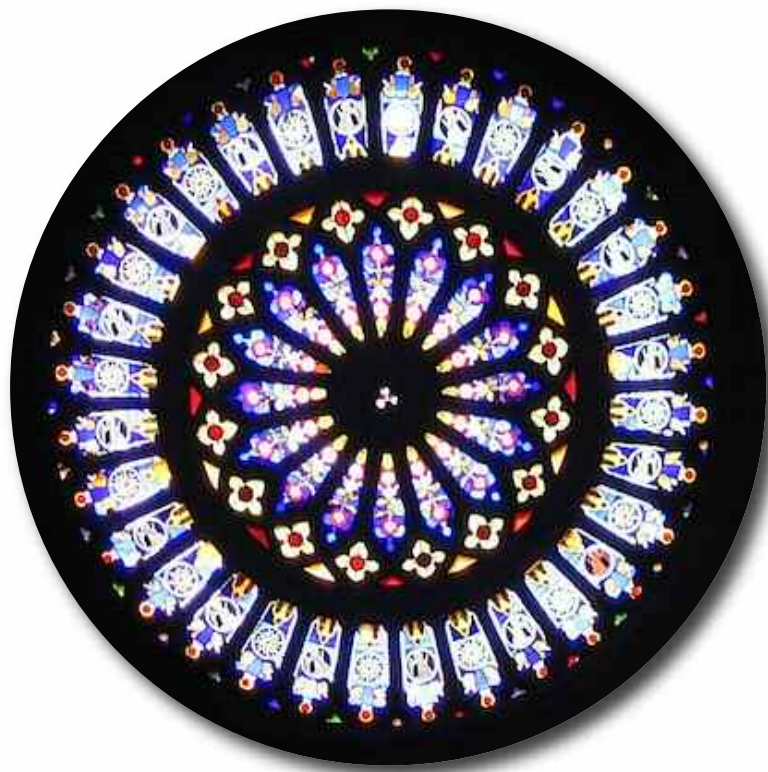
While solar cycle 24 is becoming more active, affecting all beings on Earth, we can decide on how to react to these changes. It is important to remember that the increasing solar activity can have a positive effect, when we stay centered – it is a time when opportunity and creativity can flourish along with increased individual, social and collective coherence and enlightenment. It’s an auspicious opportunity for advancing our intelligence on how to cooperate more harmoniously with each other and with planet Earth. This can eventually lead to a global consciousness transformation and increasing peace. We can decide to live from the heart, increase our coherence and co-create actions we can take through these opportune times that would include committing to reducing fear becoming more responsible for our own energy, and increasing love, care and respect for others and for ourselves. This can do much to restore balance and energetic alignment between the Earth and the global community. ☉

REFERENCES

- ¹ MCCRATY, R., CHILDRE, D. (2010). "Coherence: Bridging Personal, Social and Global Health", *Alternative Therapies in Health and Medicine*, 16(4): 10-24.
- ² STEIN, J., ED. (1975). *The Random House College Dictionary*: 261 (Random House: New York).
- ³ MCCRATY, R., ATKINSON, M., TOMASINO, D., & BRADLEY, R. T. (2009). "The coherent heart: Heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order", *Integral Review* 5(2): 10-115.
- ⁴ MCCRATY, R., ET AL. (2006). *The coherent heart: Heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order*, Publication No. 06-022 (Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath).
- ⁵ MCCRATY, R. AND CHILDRE D. (2004), *The grateful heart: The psychophysiology of appreciation*, in *The Psychology of Gratitude* (R.A. Emmons and M.E. McCullough eds.): 230-255, (Oxford UP: New York).
- ⁶ MCCRATY, R., M. ATKINSON, AND D. TOMASINO (2003). "Impact of a workplace stress reduction program on blood pressure and emotional health in hypertensive employees", *Journal of Alternative and Complementary Medicine* 9(3): 355-369.
- ⁷ REIN, G., M. ATKINSON, AND R. MCCRATY (1995). "The physiological and psychological effects of compassion and anger", *Journal of Advancement in Medicine* 8(2): 87-105.
- ⁸ MCCRATY, R., ET AL. (1996). "Music enhances the effect of positive emotional states on salivary IgA", *Stress Medicine* 12(3): 167-175.
- ⁹ TILLER, W.A., R. MCCRATY, AND M. ATKINSON (1996). "Cardiac coherence: A new, noninvasive measure of autonomic nervous system order", *Alternative Therapies in Health and Medicine* 2(1): 52-65.
- ¹⁰ MCCRATY, R., ET AL. (1995). "The effects of emotions on short-term power spectrum analysis of heart rate variability", *American Journal of Cardiology* 76(14): 1089-1093.
- ¹¹ MCCRATY, R., ET AL. (1998). *The electricity of touch: Detection and measurement of cardiac energy exchange between people*, in *Brain and Values: Is a Biological Science of Values Possible* (K.H. Pribram, ed.): 359-379, Lawrence Erlbaum Associates, Publishers: Mahwah, NJ).
- ¹² LUSKIN, F., ET AL. (2002). "A controlled pilot study of stress management training of elderly patients with congestive heart failure", *Preventive Cardiology* 5(4): 168-172, 176.
- ¹³ ARGUELLES, L., R. MCCRATY, AND R.A. REES (2003). "The heart in holistic education", *Encounter: Education for Meaning and Social Justice* 16(3): 13-21.
- ¹⁴ BARRIOS-CHOPLIN, B., R. MCCRATY, AND B. CRYER (1997). "An inner quality approach to reducing stress and improving physical and emotional wellbeing at work", *Stress Medicine* 13(3): 193-201.
- ¹⁵ MCCRATY, R. (2003). *Heart-brain neurodynamics: The making of emotions*, Publication No. 03-015 (Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath)..
- ¹⁶ MCCRATY, R. AND M. ATKINSON (1998). *Spontaneous heart rhythm coherence in individuals practiced in positive-emotion-focused techniques*. Unpublished data.
- ¹⁷ MCCRATY, R., ET AL. (2003). *Impact of the Power to Change Performance program on stress and health risks in correctional officers*, Report No. 03-014 (Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath).
- ¹⁸ GINSBERG, J.P., BERRY, M.E., POWELL, D.A. (2010). "Cardiac Coherence and PTSD in Combat Veterans", *Alternative Therapies in Health and Medicine* 16(4): 52-60.
- ¹⁹ LLOYD, A., BRETT, D., WESNES, K. (2010). "Coherence Training Improves Cognitive Functions and Behavior In Children with ADHD", *Alternative Therapies in Health and Medicine* 16(4): 34-42.
- ²⁰ BRADLEY, R.T., MCCRATY, R., ATKINSON, M., TOMASINO, D. (2010). "Emotion Self-Regulation, Psychophysiological Coherence, and Test Anxiety: Results from an Experiment Using Electrophysiological Measures", *Applied Psychophysiology and Biofeedback* 35(4): 261-283.
- ²¹ CHILDRE, D. AND H. MARTIN (1999). *The HeartMath Solution* (San Francisco, CA: HarperSan Francisco).
- ²² CHILDRE, D. AND D. ROZMAN (2002). *Overcoming Emotional Chaos: Eliminate Anxiety, Lift Depression and Create Security in Your Life* (San Diego: Jodere Group).
- ²³ CHILDRE, D. AND D. ROZMAN (2005). *Transforming Stress: The HeartMath Solution to Relieving Worry, Fatigue, and Tension* (Oakland, CA: New Harbinger Publications).
- ²⁴ LEHRER, P.M., E. VASCHILLO, AND B. VASCHILLO (2000). "Resonant frequency biofeedback training to increase cardiac variability. Rationale and manual for training", *Applied Psychophysiology and Biofeedback* 25(3): 177-191.
- ²⁵ BRADLEY, R.T. (1987). *Charisma and Social Structure: A Study of Love and Power, Wholeness and Transformation* (New York: Paragon House).
- ²⁶ DEBOER, R.W., J.M. KAREMAKER, AND J. STRACKEE (1987). "Hemodynamic fluctuations and baroreflex sensitivity in humans: A beat-to-beat model", *American Journal of Physiology* 253(3 Pt 2): H680-H689.
- ²⁷ BARRIOS-CHOPLIN, B., ET AL. (1999). *The effect of employee self-management training on personal and organizational quality*, Publication No. 99-083 (Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath).
- ²⁸ MCCRATY, R. (2004). *The energetic heart: Bioelectromagnetic communication within and between people*, in *Bioelectromagnetic Medicine*, P.J. Rosch and M.S. Markov eds: 541-562 (Marcel Dekker: New York).
- ²⁹ RUSSEK, L.G. AND G.E. SCHWARTZ (1996). "Energy Cardiology: A dynamical energy systems approach for integrating conventional and alternative medicine", *Advances* 12(4): 4-24.
- ³⁰ MCCRATY, R., R.T. BRADLEY, AND D. TOMASINO (2004). "The resonant heart", *Shift: At the Frontiers of Consciousness*, Dec 2004-Feb. 2005 (No. 5): 15-19.

- ³¹ HALBERG, F., ET AL. (2000). "Cross-spectrally coherent ~10.5- and 21-year biological and physical cycles, magnetic storms and myocardial infarctions", *Neuroendocrinology* 21: 233-258.
- ³² HALBERG, F., ET AL. (2008). "Cycles Tipping the Scale between Death and Survival (= "Life")", *Progress of Theoretical Physics Supplement* 173: 153-181.
- ³³ TCHIJEVSKY, A.L. (trans. de Smitt, V.P.) (1971). "Physical Factors of the Historical Process", *Cycles* 22: 11-27.
- ³⁴ CORNELISSEN, G., ET AL. (1999). "Chronomes, Time Structures, for Chronobioengineering for 'A Full Life'", *Bio-medical Instrumentation and Technology* 33: 152-187.
- ³⁵ OTSUKA, K., ET AL. (2008). "Chronomics and "Glocal" (Combined Global and Local) Assessment of Human Life", *Progress of Theoretical Physics Supplement* 173: 134-152.
- ³⁶ ERTEL, S. (1998). "Cosmophysical correlations of creative activity in cultural history", *Biophysics* 43(4): 696-702.
- ³⁷ WWW.GLCOHERENCE.ORG.
- ³⁸ PERSINGER, M.A. (1987). "Geopsychology and geopsychopathology: Mental processes and disorders associated with geochemical and geophysical factors", *Experientia* 43: 92-104.
- ³⁹ — (1995). "Sudden unexpected death in epileptics following sudden, intense, increases in geomagnetic activity: prevalence of effect and potential mechanisms", *Int J Biometeorol* 38(4): 180-187.
- ⁴⁰ — (2008). "On the possible representation of the electromagnetic equivalents of all human memory within the earth's magnetic field: Implications of theoretical biology", *Theoretical Biology Insights* 1: 3-11.
- ⁴¹ — (1995). "On the possibility of directly accessing every human brain by electromagnetic induction of the fundamental algorithms", *Perceptual and Motor Skills* 80: 791-799.
- ⁴² BANCEL, P. AND R. NELSON (2008). "The GCP experiment: Design, analytical methods, results". *J.S.E.* (In press).
- ⁴³ NELSON, R.D., ET AL. (1991). *Analysis of variance of REG experiments: Operator intention, secondary parameters, database structure* (Technical Note PEAR 91004, Princeton University).
- ⁴⁴ NELSON, R. (2011). "Effects of Globally Shared Attention and Emotion", *Journal of Cosmology* 14.
- ⁴⁵ MCCRATY, R. (2010). *The Global Coherence Initiative: Measuring Human-Earth Energetic Interactions*, in *3rd Heart: King of organs conference* Hufuf, Saudi Arabia.
- ⁴⁶ AMELING, A. (2000). "Prayer: an ancient healing practice becomes new again", *Holist Nurs Pract* 14(3): 40-8.
- ⁴⁷ GILLUM, F. AND D.M. GRIFFITH (2009). "Prayer and spiritual practices for health reasons among American adults: the role of race and ethnicity", *J Relig Health* 49(3): 283-95.
- ⁴⁸ RADIN, D. (1997). *The Conscious Universe: The Scientific Truth of Psychic Phenomena* (San Francisco, CA: HarperEdge).
- ⁴⁹ SCHWARTZ, S.A. AND L. DOSSEY (2010). "Nonlocality, intention, and observer effects in healing studies: laying a foundation for the future", *Explore* 6(5): 295-307.
- ⁵⁰ HAGELIN, J. (2007). "The Power of the Collective", *Shift: At the Frontier of Consciousness* 15: 16-20.
- ⁵¹ HAGELIN, J.S., ORME-JOHNSON, D. W., RAINFORTH, M., CAVANAUGH, K., & ALEXANDER, C. N. (1999). "Results of the National Demonstration Project to Reduce Violent Crime and Improve Governmental Effectiveness in Washington, D.C.", *Social Indicators Research* 47: 153-201.
- ⁵² DAVIES, J.L. (1988). *Alleviating political violence through enhancing coherence in collective consciousness: Impact assessment analysis of the Lebanon war*. Dissertation Abstracts International 49(8): 2381A.





DEVELOPMENT AND CONSCIOUSNESS: GROWING UP IS WAKING UP

TERRI J. O'FALLON



Terri O'Fallon has a Bachelors degree in Education, a Master's degree in Special education, a PhD in Integral Studies, a Masters degree in Spiritual Direction, and she is a certified scorer of the Leadership Development Framework.

Terri is a specialist in Transformative Learning and Change in Human Systems and in distance learning.

Her interests lie in the living experiments of evolutionary systems design; adult levels of development and how they condition Leadership, systems, culture and individual maturity; and the joys of ordinary living. Her concentration is the design and implementation of the core developmental trajectory and span of human systems of all kinds. She has over 25 years of experience working with many different kinds of human systems, including business, community, educational and political.

Terri has taught, consulted and led in this field for almost 46 years. Her work includes the initiation, launching and leading of a non-profit corporation, administration in public schools, teaching at colleges and universities and consulting in various inner-city schools around the United States as a catalyst for school transformation.

Terri is a founder and principal of Pacific Integral (PI) and a partner in the creation of the Generating Transformative Change, an incubator for new forms of leadership, consciousness and action designed to meet the complex, emerging needs of a more compassionate, equitable, ethical, and sustainable human society. PI brings together people who are willing to experiment with new integral structures for realizing transformative change in evolutionary systems, to relieve suffering on the planet and to develop people in ways that will bring joy and wisdom into the world through service.

Terri has also founded the Developmental Research Institute and is currently conducting integral research on later levels of adult development. She resides in Issaquah WA, USA.

THE NEW PARENTS RECEIVED THEIR NEWBORN with eyes of wonder – a miracle of their own making. Already they had images of her walking, talking, learning to read, and eventually reaching adulthood. It is a common parental expectation that a child will develop, and they wait eagerly as those transformational steps emerge in the evolution of their sons and daughters.

In the past fifty years, however, researchers have verified continued development through all of one's

lifespan. While the human body may not continue to grow, one's development, it seems, continues on. Researchers have documented the developmental stages of the human life span through adulthood, from evolving ego development, (Loevinger, 1970) to the evolving values (Beck, 1996), to evolving morals (Kohlberg, 1973), to evolving stages of faith (Fowler, 1981), to later stages of adult development (Cook-Greuter, 1999). In fact, there seems to be over 100 areas of adult developmental research all of which more or less agree on the basic structures of developmental stages (Wilber, 2000) and yet adults so seldom have this focus in their mainstream life. While just about every parent consults developmental resources to support the growth and development of their children, few adults do the same for their own.

In contrast, there is also an interest in states of consciousness. There is an abundance of descriptions of altered states and awakening experiences in concrete, subtle, causal and non-dual states. Through the tides of time, the great sages and saints have impressed upon their students the importance of advancing their relationship with the ineffable and even if the spiritual interpretations are abandoned, people still use multiple means, such as hallucinogens, to achieve altered states. Yet, states alone don't seem to be enough to reach the heights of the human promise. While stages are permanent realizations that people walk around with as ordinary, states are profound apprehensions, but temporary, even as they are inspirational, and life giving.

More recently, there seems to be an interest in the connection between the developmental stages, and these states of consciousness (Wilber, 2006). Research is beginning to be conducted on this intersection of life span development and state consciousness (O'Fallon 2012).

WHAT IS LIFE SPAN DEVELOPMENT?

Piaget's (1969) developmental theory of stages from childhood to adulthood is commonly known, such as the egocentric stage (e.g. two year olds), the concrete operational stage (e.g. reasoning with concrete objects), and the formal operational stage (e.g. reasoning about thinking). Indeed, all of these stages can also

be found in adults as well (HY & Loevinger, 1989), so it seems that they do not rigidly conform to age as one might have once thought. A range of cognitive and embodied complexities exists for all ages in both children and adults. However the trajectory and order of the stages themselves seem to be quite reliable even if they don't all happen at the same time in everyone's life (Wilber, 1995).

The Cook-Greuter scale (1999) is a measure of adult developmental levels having the widest span of any of the developmental scales, and so serves as a useful basis for research in this area. It consists of nine adult levels of development (Cook-Greuter, 2002) and more recent research has added two new stages with tiers of development (O'Fallon, 2011). Below is a pictorial model of how these stages work together.

literature (Wilber 2006, Aurobindo, 2000). Aurobindo, particularly refers to the Intuitive, Overmind, Super Mind and Ishwara stages, which in the developmental approach above, can be thought of as stages in the non-dual tier. These stages would be very different from non-dual states, which are somewhat rare as states are concerned. The non-dual stages are likely exceedingly rare, since the latest stage, Unitive, that has research support, is reported to have only .01% of the developmental database at that level (Cook Greuter, 2002). This stage is the third one of the Causal tier stages so one might surmise a much smaller percentage at the Non-Dual Tier. The non-dual stages are not yet supported by research.

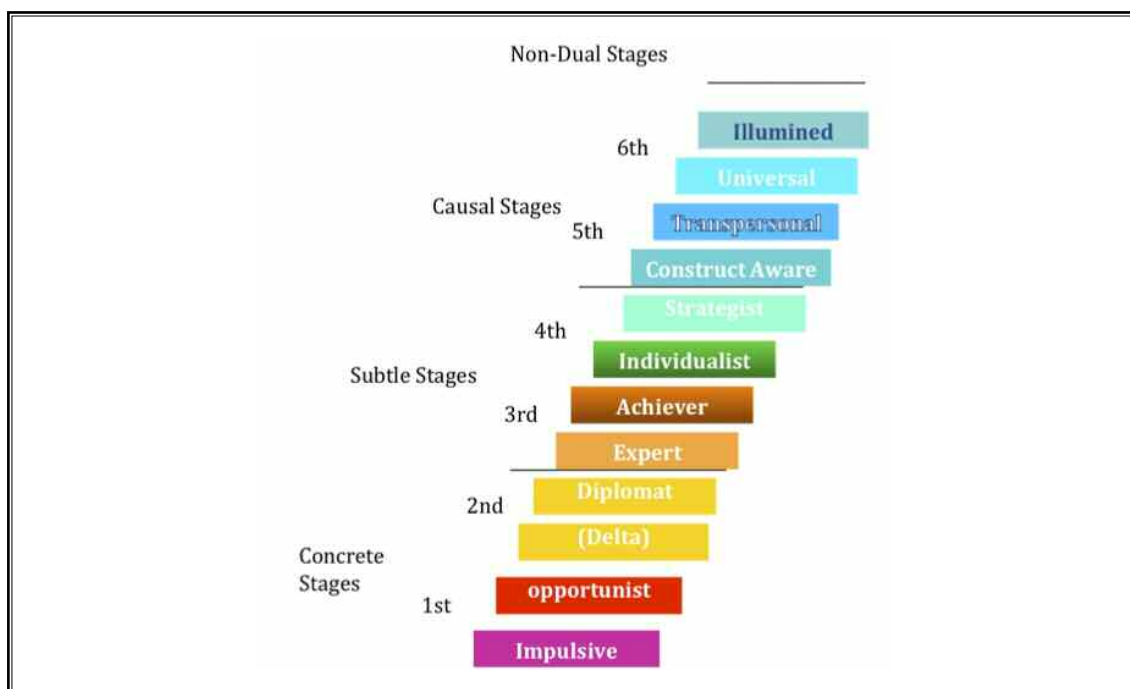


FIG. 1 - Stages and Tiers of development.

This developmental trajectory highlights distinct patterns with two stages to every person perspective (early and late). In the first tier of four stages, concrete perspectives are taken; in the second tier of four stages, one evolves the capacity to be aware of thinking, feeling and contexts as subtle perspectives; the third, causal tier introduces the progressive capacities to be aware of one's own awareness. These three tiers all have a research base supporting them (Loevinger, 1970; Cook Greuter, 1998; O'Fallon 2012). In addition to the stages and tiers that are supported by a research base, non-dual stages are referred to in the

Generally the terms "concrete", "subtle" and "causal" "non-dual" are generally thought of as states, and not stages. When one carefully looks at the characteristics of the stages within the tiers, it becomes clearer that the tiers have these same characteristics embedded within them. The primary difference is that individuals embodied in stages (as opposed to states) are walking around with these experiences as ordinary occurrences, whereas states are generally defined as experiences that are out of the ordinary and not ever-present. Both the tier stages, and the states, then, have these same words defining them; states seem to begin the process as extraordinary and then they settle into a stage where

they become ordinary. In this paper the terms concrete, subtle, causal and non-dual states will refer to state stages, and the terms concrete, subtle, causal and non-dual tiers will refer to stage tiers.

The stages of concrete, subtle, causal and non-dual states occur in each of the concrete, subtle, and causal tiers and their developmental stages. Thus, people at very early developmental levels can have quite advanced states, whereas people at the latest developmental levels require previous capacity with certain states, depending on whether their stage is in the subtle, or causal tier. Theoretically, in the non-dual tier all the necessary states would have become ordinary even as there will always be access to states.

WHAT ARE STATE STAGES?

People have apprehended countless altered states through the expanse of history, from twirling, exposing oneself to extremes of weather, ingesting entheogens or hallucinogenic plants, ritual, chanting, prayer and meditation (Smith, 1989). It seems that the major spiritual paths have categorized some of these experiences into concrete states, subtle states, causal states and non-dual states (Wilber, 1986).

These states are defined here as follows:

a) The concrete state is a temporary altered sense of external sensory concrete consciousness: for example,

a heightened experience from the external senses, such as the state experience that can come from tasting ice-cream or chocolate, the feeling from a foot massage, seeing a sunset or hearing beautiful music;

b) The subtle state is awareness of temporary altered internal senses such as visual flashes/images (perhaps in day dreaming or night dreaming), internal audition (hearing internal voices, music, messages), internal feeling (such as bliss);

c) The causal state is the temporary altered state of witnessing one's awareness, resulting in apprehensions of emptiness, nothingness, and transcendence;

d) The non-dual state is a temporary altered state of non-dual consciousness, when awareness, and that which arises within one's awareness, are the same thing (Brown, 2006), sometimes called "Oneness", or "suchness".

The Wilber-Combs Matrix posits a relationship between states and stages in theory, which can be summarized as follows: the experience of states vary based on one's developmental level; for every level of development, there could be corresponding concrete, subtle, causal and non-dual states, and one will interpret those state experiences through the lens of one's developmental perspective (Wilber, 2006). The following image describes this relationship.

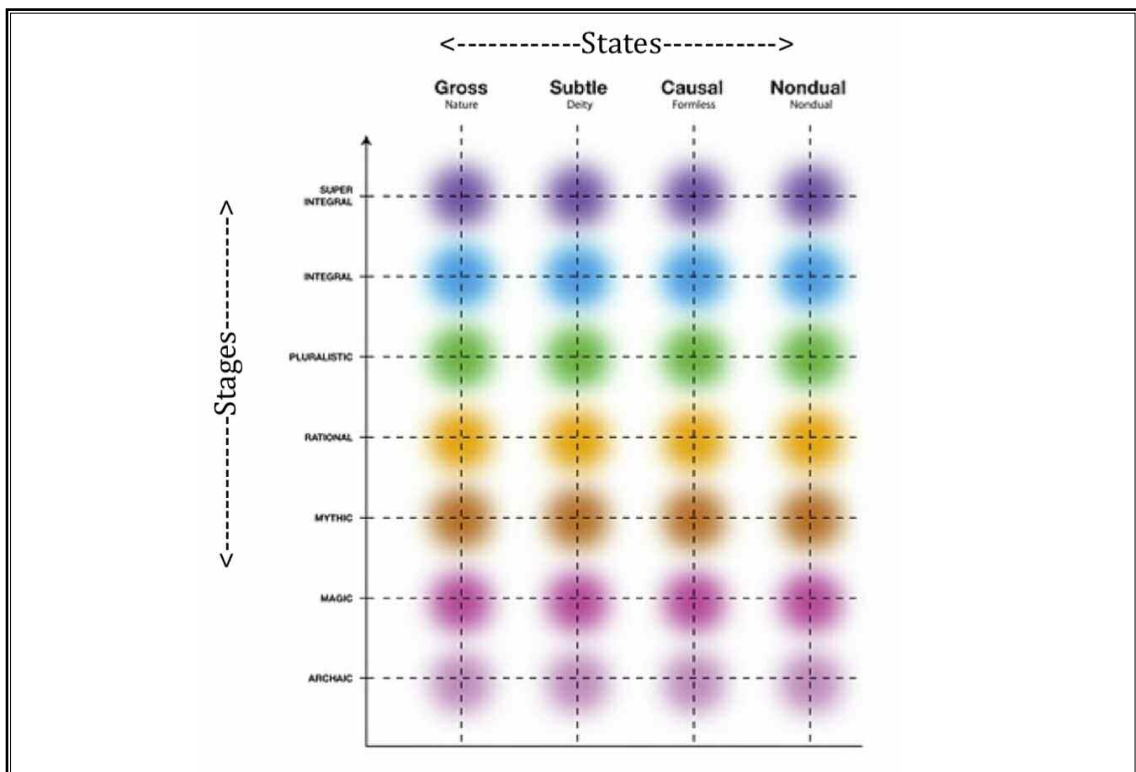


FIG. 2 - The Wilber-Combs Matrix, Modified (Wilber, 2006: 90).

The developmental stages depicted on the left side of this model may be called by different names, but they all represent the same permanent structural stages of development. Across the top are the temporary states of consciousness. Though this is a theoretical model, there is an intuitive soundness to it.

In relationship with this theoretical model, research brings an embodied granularity to this representation through the use of 1) individual developmental inventories that provide a score indicating one's developmental stage; 2) longitudinal methodical inter-observations of people throughout several years; and 3) structural and phenomenological research (O'Fallon, June 2010).

PUTTING IT ALL TOGETHER

The co-joining of adult developmental research with knowledge of states prompted working beyond the theoretical supposition of the Wilber-Combs Matrix, which shows how states and stages are matrixed. Theoretically, states could be conceived in a more interpenetrated way as the forerunner of stages and eventually being with them as one. To investigate this theoretical possibility, combined methodologies described above were used to apprehend exactly how these two areas are coupled (O'Fallon, 2011). The research approach relied on data from Sentence Completion Tests, which is a validated and reliable developmental inventory (Cook-Greuter, 1999), and used the process of 1) combing through thousands of sentence completions, looking for evidence of the relationship between states and the developmental stages, 2) examining sentence structures, including verbs and their objects. From this research, along with years of behavioral inter-observations, patterns began to reveal themselves: the early four developmental stages represent primarily concrete and subtle perspectives that focus on concrete objects; the next four subtle stages added subtle perspectives and focus on subtle objects; the next four causal stages focus on awareness of awareness and their objects. Consistently, states

are a necessary component of development from birth through the latest documented stages (O'Fallon 2012). The following is a brief description of the trajectory of how this seems to occur.

At the concrete, first-person perspective, internal senses are developed, which first present as states, such as temporary visualization flashes (think of peek-a-boo) and listening to interior sounds. However, all of these internal states have concrete objects (such as mommy, a toy, the dog, daddy's voice). Once these internal sensory experiences develop beyond states, and become ordinary such that one can walk around with them permanently, one can use this stable capacity to step outside of oneself and visualize oneself in another person's position. This allows an individual to take a second person perspective, imagining themselves standing next to someone else, seeing what they are seeing. Once this capacity is stable, new subtle states begin to arise in which subtle objects that can't be visualized, appear (such as love and care).

While subtle states are necessary to move to the subtle tier, the concrete causal and non-dual states can be cultivated but are not necessary to move to the next subtle stages. However they do occur. For example, in some Theravada Buddhist practices, walking meditation practice may eventually give the walker a state of losing their feet or legs. They simply seem to disappear! This is one of the concrete causal/emptiness states that can occur at the concrete tier. In addition, one may experience a concrete non-dual state. This would involve the state of awareness where the mountain (for example) arises in one's own awareness such that there is no difference between awareness and the mountain (Brown, 2006). They have become 'One'. Below is a chart that describes some of the possible interpenetrations of the early four developmental stages and the kinds of states that arise. Notice that while they are concrete, subtle, causal and non-dual states, all of them have concrete objects, or visualized concrete objects (as in concrete deity mysticism)

CONCRETE SUB-QUADRANTS	CONCRETE STATES	SUBTLE STATES	CAUSAL STATES	NON-DUAL STATES
EARLY 1 st PERSON PERSPECTIVE	encountering a sunset,	imagine	moving without a mover	Oneness with concrete
LATE 1 st PERSON PERSPECTIVE	backrub,	(day) dream about a house,	emptiness of the concrete	concrete nature mysticism
EARLY 2 nd PERSON PERSPECTIVE	chocolate,	God in the sky,	(illusion)	concrete deity mysticism
LATE 2 nd PERSON PERSPECTIVE	incense	mommy,		concrete formless mysticism
		fairy,		concrete Non-Dual mysticism
		animal		

FIG. 3 - Concrete States in Concrete Stages.

This process of 1) developing a state, 2) maturing it until it is an ordinary permanent stage, and 3) then using this new capacity to step outside of oneself to take an additional perspective, can be seen repeatedly along the entire scale of development, through all four tiers. What becomes present is the understanding that growing up is waking up into new states, which helps one further grow up.

Continuing on, this process, repeats at the subtle tier. What was a state in the concrete tier becomes ordinary at this tier and is no longer a state. When at the third-person perspective, people experiences subtle stages with subtle objects as one conducts their daily lives thinking about concrete thinking, planning, looking into the future, and experiencing complex emotions, etc. Individuals eventually use these subtle, ordinary third person stages to take fourth-person postmodern

arise. The concrete is “subtized” by abstracting away from the concrete; an individual may have a state involving mathematical symbols that result in the creation of a beautiful building (architecture) or bridge (engineering). Related to subtle states in the subtle tier, one might experience a temporary state of witnessing their dreaming (lucid dreaming). A causal state in the subtle tier might be the experience of thoughts without a thinker. Non-dually one might have the experience of any of these states arising within awareness such that there is no separation with them (they become one with them). Similar states can occur in the realms of the kinesthetic (energetic) and the auditory (FIGURE 4).

At the causal tier, the concrete, subtle and causal states one has in the subtle tier become

SUBTLE SUB-QUADRANTS	SUBTLE CONCRETE STATES	SUBTLE SUBTLE STATES	SUBTLE CAUSAL STATES	SUBTLE NON-DUAL STATES
EARLY 3 rd PERSON PERSPECTIVE	encountering abstract symbols	imagine,	thoughts without a thinker	Oneness with subtle
LATE 3 rd PERSON PERSPECTIVE	of concrete symbols:	(day) dream,	emptiness of the subtle	subtle concrete mysticism
EARLY 4 th PERSON PERSPECTIVE	maps/drawings of nature,	experience	world of thought/feeling/	(One with archetypes
LATE 4 th PERSON PERSPECTIVE	mathematical encounters,		contexts	for example)
	archetypes,	bliss,	(illusion)	subtle deity mysticism
	astrology,	lucid dreaming with		(One with bliss states)
	concrete symbolic art	subtle objects		subtle formless mysticism
				(One with formlessness
	energetic states	non-embodied beings		of the subtle realms)
				subtle Non-Dual mysticism
				(Oneness with all of the subtle)

FIG. 4 - States in Subtle Stages.

perspectives, when they step outside of themselves and visualize/experience from the position of subtle contexts, gazing from the perspective of those contexts at others and themselves and seeing their effects (the social construction of reality).

During this time it is common for people to find themselves in practices that support the development of causal states (meditation, sports and embodied practices that induce causal states, etc) and this stimulates the move into the fifth-person perspective at the causal tier.

The chart below shows the relationship between concrete states, subtle states, causal states and non-dual states in the subtle developmental stages. For example, rather than concrete pictures (symbols of the concrete) which arise in the concrete tier, in the subtle tier concrete symbols of symbols begin to

ordinary, and people walk around, permanently experiencing awareness of their awareness, in the moment. From this they are aware of their awareness of the emptiness of all subtle thoughts, feelings, ideas, and contexts that they have put such solid definitions and boundaries around. When they become mature in this perspective they can step out of their personal causal self-structure and stand in the shoes (beyond contexts) of the Kosmos, looking at themselves and everything from the whole of the concrete, subtle and causal indwelling. Their states tend to move first into formless mysticism and later into non-dual states. For example they may eventually experience a state experiencing the emptiness or fullness of the world of matter (concrete world), world of senses (subtle world), world of Mind as experienced through Mind and bring this all to a non-dual state as they arise within the Witness as “One”.

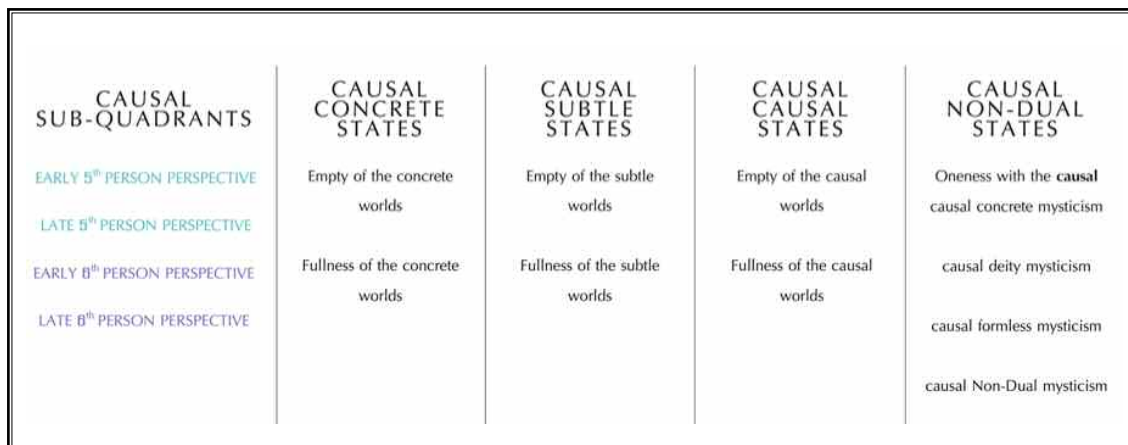


FIG. 5 - States in the Causal Stages.

One can only speculate on the experiences of the non-dual tier based on the patterns of states and stages that occur in the first three tiers. From looking at the patterns, it may be that the non-dual becomes so ordinary that one is walking around with the non-dual experience of all worlds arising within the Witness outside of the World of Mind, first with an individual sense and later with a sense of just being it all, but that All is a far different All from what is encountered at the previous tiers; the world of Mind that makes distinctions (consisting of the concrete tier, the subtle tier and the causal tier) that people mostly dwell in, would perhaps, simply be a tool as one becomes the Being beyond this world of Mind that transcends and includes the world of the senses, that transcends and includes the world of matter.

SUMMARY

From the initial to the latest developmental levels and states, the representations of vibratory life are so evident in the earliest renditions of experience, from breathing, to feeling the vibrations within one's being, to vibrating back and forth between concrete, subtle, causal and non-dual states, stages and tiers: iterative vibrations replicating themselves across all fields of awareness, all levels of being. The expansion moves beyond individual experience to collective experiences, to contextual experiences to experiences of the Kosmos as a whole, only step out of that to find that the container that holds this vastness is nothing but a world of Mind that makes distinctions. The interpenetration of states and stages support the gradual evolution through the Concrete tier where the concrete is an ordinary stage and subtle states with concrete objects are cultivated. Evolution

continues, then, through the subtle stages where subtle stages are ordinary and causal states with subtle objects are cultivated. Eventually the causal become ordinary in the Causal tier. Non-dual states are cultivated in the Causal tier and it might be speculated from the pattern that they become ordinary in the Non-dual tier; where Non-duality with the entire concrete world, subtle world, and causal world occurs.

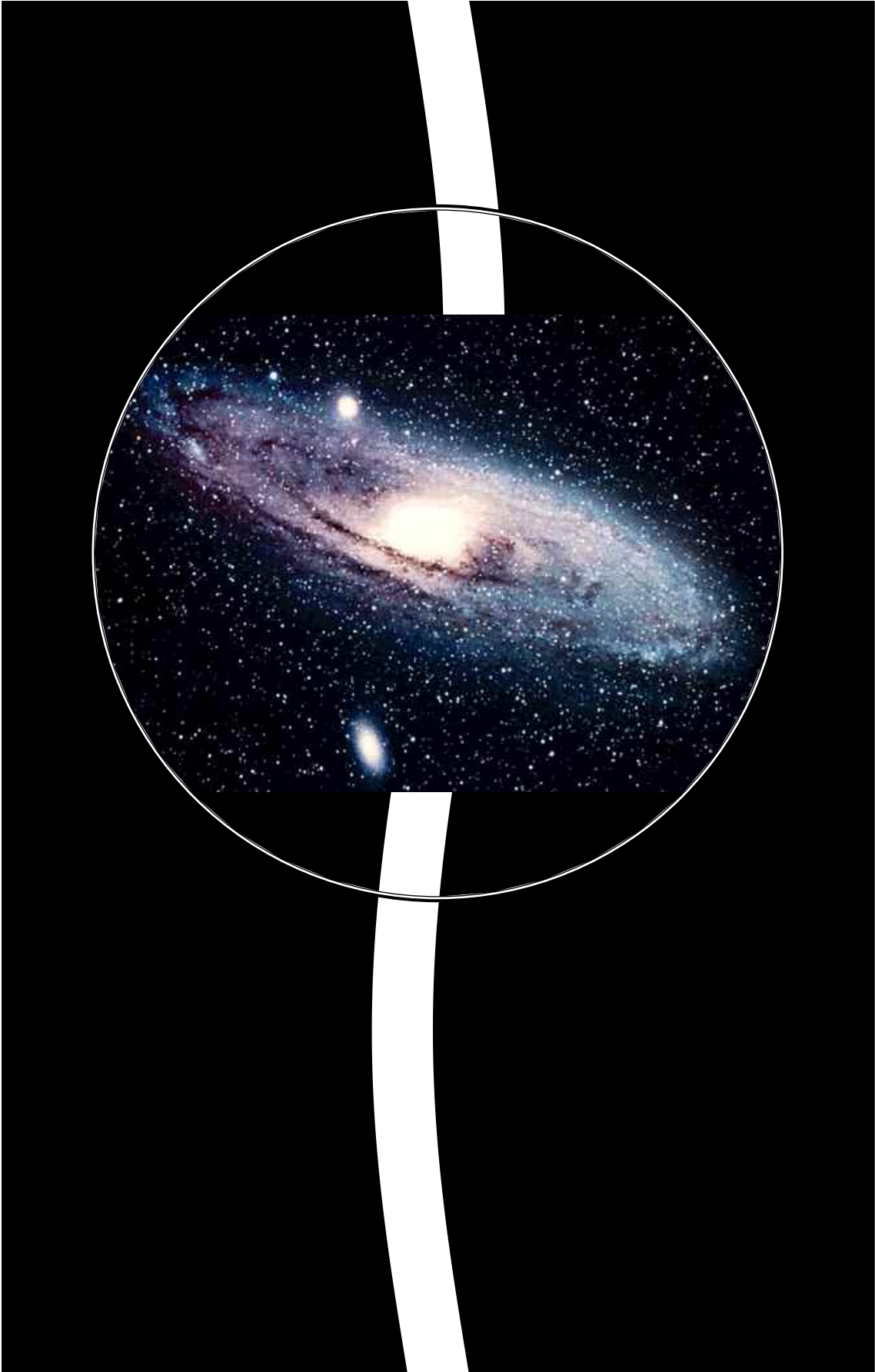
It seems that the human heritage and promise is to rock back and forth in the Kosmic rocking chair, encountering the Concrete face of God, the Subtle face of God, and the Causal face of God toward a Oneness to the whole of the Sacred, Waking up our Growing up and Growing up our Waking up. ☉

REFERENCES

- BECK, D., & COWAN. (1996). *Spiral Dynamics: Mastering Values, Leadership and Change* (Malden, MA: Blackwell Publishers).
- BROWN, D. (2006). *Pointing Out the Great Way: the Stages of Meditation in the Mahamudra Tradition* (Boston: Wisdom).
- COOK-GREUTER, S. (1999). *Postautonomous Ego Development: a Study of its Nature and Measurement*. (Ed. D), (Harvard, UMI).
- (2002). *Ego Development: Nine Levels of Increasing Embrace*. [Retrieved from <http://www.cook-greuter.com/>].
- FOWLER, J. W. (1981). *Stages of Faith: the Psychology of Human Development and the Quest for Meaning* (San Francisco: Harper).
- HY & LOEVINGER, J. (1989). *Measuring Ego Development: Supplementary Manual and Exercises for Form 81 of the Washington University Sentence Completion Test: Volume I. Manual*. (St Louis MO: Washington University, Department of Psychology).

- KOHLBERG, L. (1973). "The Claim to Moral Adequacy of a Highest Stage of Moral Judgment", *Journal of Philosophy*, 70 (18): 630-646.
- LOEVINGER, J., AND R. WESSLER. (1970). *Measuring Ego Development 1: Construction and Use of a Sentence Completion Test*. (San Francisco: Jossey Bass).
- O'FALLON, T. (June 2010). "Developmental Experiments in Individual and Collective Movement to Second Tier", *Journal of Integral Theory and Practice*, 5(2): 149-160.
- *The Collapse of the Wilber Combs Matrix: The Interpenetration of the Structure Stages and State Stages*, in *Proceedings of the Integral Theory Conference*, Aug. 2010, JFK U.
- (2011). *StAGES: Growing Up is Waking Up-Interpenetrating Quadrants, States and Structures* [Retrieved from www.pacificintegral.com].
- PIAGET, J. (1969). *The Psychology of the Child*. (New York: Basic Books).
- SMITH, H. (1989). *The Religions of Man*. (New York: Harper Perennial).
- WILBER, K. (1995). *Sex, Ecology, and Spirituality: the Spirit of Evolution*. (Boston: Shambhala).
- (2000). *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*. (Boston: Shambhala).
- (2006). *Integral spirituality: a Startling New Role for Religion in the Modern and Postmodern World*. (Boston: Shambhala).
- WILBER, K., J. ENGLER, AND D. P. BROWN. (1986). *Transformations of Consciousness: Conventional and Contemplative Perspectives on Development*. (Boston: Shambhala).





HOW TO IDENTIFY WITH THE CREATOR OF THE UNIVERSE

FRED ALAN WOLF



Fred Alan Wolf, aka Dr Quantum, is a physicist, writer, and lecturer. He received his PhD in theoretical physics from UCLA (1963) and soon afterwards began researching the field of high atmospheric particle behavior following a nuclear explosion. Wolf has delved into the relationship between human consciousness, psychology, physiology, the mystical, and the spiritual. His investigations

have taken him from intimate discussions with physicist David Bohm to the magical and mysterious jungles of Peru, from master classes with Nobel Laureate Richard Feynman to the high deserts of Mexico, from a significant meeting with Werner Heisenberg to the hot coals of a firewalk.

Former professor of Physics at the US San Diego State University for twelve years, Dr Wolf has taught also at the University of London, the University of Paris, the Hahn-Meitner Institute for Nuclear Physics in Berlin, the Hebrew University of Jerusalem. His work in quantum physics and consciousness is well known through scientific and popular writing and for his simplification of the new physics. He is the author of the National Book Award for Science Taking the Quantum Leap (1982) and of many books (Parallel Universes, The Dreaming Universe, The Eagle's Quest, The Spiritual Universe, Mind into Matter, Matter into Feeling, The Yoga of Time Travel: How the Mind Can Defeat Time, Dr. Quantum Presents, A Little Book of Big Ideas).

Wolf is a Member of the Martin Luther King, Jr. Collegium of Scholars and is frequently in demand as a lecturer, keynote speaker, and consultant to industry and the media. He has appeared as the resident physicist on The Discovery Channel's The Know Zone and on many radio talk shows and television shows across the United States and abroad. Website: www.fredalanwolf.com; fred@fredalanwolf.com.

One extreme is the idea of an objective world, pursuing its regular course in space and time, independently of any kind of observing subject; this has been the guiding image from modern science. At the other extreme is the idea of a subject, mystically experiencing the unity of the world and no longer confronted by an object or by any objective world; this has been the guiding image of Asian mysticism.

Our thinking moves somewhere in the middle, between these two limiting conceptions; we should maintain the tension resulting from these opposites.

WERNER HEISENBERG, *Across the Frontier.*

Reality? We don't got to show you no steeeenking reality.

NICK HERBERT, physicist and author describing quantum physics while imitating a famous scene in the film *Treasure of the Sierra Madre*¹.

HERE IS A MIDDLE REALM OF HUMAN AND animal experience that lies in the twilight – between the conscious mind in waking awareness, “in here,” and the physical world we all take to be real and “out there.” Although Werner Heisenberg in the above epigram only refers to a “tension” existing between the inner world of a subject and the outer world of an object, he is perhaps referring to a new conceptual vision of the universe of mind and matter that over the last century has been discovered to have its basis in quantum physics. I have referred to this concept as the “imaginal” realm and pointed out that it is the ground from which all artistic creation develops and the self expresses. Let me take it for the moment again that this realm is real. Just as in quantum physics where the imaginal mappings of the flows of probabilities somehow produce the world of physical matter and energy, out of “it” arises everything that exists within our perception – our thoughts, feelings, sensations, physical space and time, and, as I have attempted to show in nearly all of my books, even the self.

Albert Einstein once said “We can't solve problems by using the same kind of thinking we used when we created them.” Considering that the discoveries of quantum physics have only recently been brought to the attention of common people primarily through the inventions of devices that quantum physics itself has made possible, such as the modern computer and the laser which made possible recording vast amounts of data on new forms of everyday devices, it is already apparent that quantum physics has changed our thinking regarding our technologically advanced world. We now see, practically instantly, what's going on around our world as if it was happening around our corner.

As Marshall McLuhan promised a long time ago – “the medium is the message” – the form of the medium is itself the message or, if you will, the medium is also the *massage*. Thus, we enter a quantum age wherein a

symbiotic and reciprocal relationship ensues by which the medium influences how the message is perceived and that message perception in turn influences how we make media. McLuhan proposed that the medium itself, not the content it carries, should be the focus of study. He said that a medium affects the society in which it plays a role not only by the content delivered over the medium, but also by the characteristics of the medium itself.

Nowhere else is this more true than in our current world. We live in a quantum age wherein what we do affects how we do it and how we do it affects what we do. Not only is the medium the message, but the observer of that medium is also the creator of its message. Learning to assume responsibility for our creations not only transforms the world “out there” but perhaps, more importantly, it transforms us “in here.”

Why would I, a physicist, even consider such an idea as sound? My thinking about this began a long time ago, when I became interested in the overlap between matter and mind. It seemed to me that either consciousness somehow had to emerge from matter or that matter had to somehow emerge from consciousness. It really doesn't make too much difference to me which is true (and one or both of these must be true if consciousness is capable of being studied scientifically: besides, either way it goes, it is pretty amazing), it is just a fact that I am made of matter and I am conscious.

This overlap took me deep into some of the mysteries of quantum physics. I knew that quantum physics dealt with a world of imagination and did not deal with the actual world, at all. It was totally incapable of making exact mechanical predictions of the behavior of minute matter, although it could predict gross properties. It was the ability to cross over from the world of imagined happenings – the probabilities of quantum physics – to the world of actual substance that exists as objective material that greatly interested me.

It is here, in my study of the history of the subject of mind and matter, that I began to wonder about how images, feelings, thoughts, and visions of reality, the Self, and God arise. Could it be that these human experiences of subjective reality come into being in much the same way, when we see them?

This puts the observer of the universe into perspective. It also makes the role of the observer extremely powerful. Where does this observer live? The answer appears to be in the imaginal realm from which everything comes into being: observers and observed. What is the process? The answer I have offered is the process of creation itself.

At some level of my being, I see creations exist outside of ourselves. We see these creations in architecture, in

political systems, in fairy tales and, of course, in the movies. These creations tell us that vision can be a collective phenomenon. Not only do people envision reality, but states of systems do as well. A nation creates an image. So does a political party or a sect.

BIG PICTURES IN SOCIAL SYSTEMS

Social systems picture thus create themselves in the forms of architecture and in their stories and legends. Political systems imagine themselves in architectural monuments such as those that existed in Hitler's 3rd Reich and in the large constructions of statues of Lenin in Moscow before the Berlin wall came down. They also exist in the structures of our cities' skyscrapers; they sometimes confirm themselves with mad designs and phenomena.

Many unworldly phenomena like UFO and OBES, images of alien capture in the world, reflect not just images of individuals but of a whole culture. Are UFOs just fantasies, or are they something else? Artists capture them in their paintings. One can never forget the artistic impressions of Monet's garden outside of Paris, for example.

Reality, as we presently understand it, is grossly simplified in terms of our everyday experiences. We simply can't grasp it all. This is not only due to the limitations we have discovered in our sensory modalities, but also to our present understanding of the laws of physics. Quantum physics and relativity have indicated that much of reality is hidden and mysterious, and this would be directly apparent if we could experience quantum reality. It is a very bizarre universe, and mind and meaning are as important as matter and energy. The mind appears to be present in matter at many different levels. Not only does mind appear to be present in living complex organisms such as humans and animals, but also at the level of cells and even at the level of molecules and subatomic matter.

VIRTUAL REALITY AND VISION

I have attempted to show in my book *The Dreaming Universe*² that this mind, like the matter it observes, also has structures that arise through self-reflection, a process that arises in the dreaming brain in its attempts to integrate, learn, remember, and forget, all that is necessary for self-awareness. Without the ability to dream, there may not be any ability to become self-aware.

In the latest theory, uniting quantum physics and the Einstein general theory of relativity, the entire universe can be seen as a two-dimensional information structure 'painted' on the cosmological horizon like

a hologram. This holographic principle was inspired by a study of black holes; the insight was that the informational content of all the objects that have fallen into the hole could be entirely contained on its surface event horizon³.

According to the holographic principle, the 3-Dimensional world emerges out of information 'printed' on a 2-Dimensional surfaces called "light-sheets." Imagine an apple falling in a room. The light-sheets that encode the physics that describes this room are surfaces that contract at the speed of light – the contraction happens both backward and forward in time, but a contraction going backwards in time, is the same as an expansion going forward.

We can visualize these sheets as the flash of a camera. The camera flashes and light expands until it reaches the walls, forming a sheet – equivalently light moves backward in time from the walls to the camera. The light reflects off the walls and contracts back to a point. This information encoded on these light-sheets describes all the physics happening in the room at the instant the light bounces off the walls⁴.

In the TV show *Star Trek: The Next Generation*, in an episode entitled "Ship in a bottle", the crew of the ship are confounded by the appearance of the entity "Dr. M.", generated – literally off the walls – in the ship's "holodeck," a room within the ship where 3-Dimensional holographic images are generated that are so "real" that the members of the crew who experience the holodeck's virtual reality can no longer differentiate images from real objects and real people.

Dr. M. explains that somehow he has become self-conscious and wants to live in the "real" world and suggests to the captain that since he can think self-reflectively, he must be able to exist. The captain warns him that no holo-generated image can exist outside of the holodeck. But Dr. M. insists, *cogito ergo sum*, "I think therefore I am," and commands the holodeck doors to open, whereby he simply walks through the doors, into the ship's interior, leaving the holodeck much to the amazement of the ship's crew.

The story is resolved when the crew realizes that all of this has been holographically generated, including the image of Dr M. leaving the holodeck. The holodeck encompassed images of a virtual holodeck, and ship, and its crew. Dr M. and the real crew never left the holodeck. However, Dr M. insists on continuance as a real being, so the captain creates an image of the whole universe for "him" and sets up a cyberspace in a cube so that Dr M. is capable of moving about this "universe" while confined in the holodeck's library. Dr M. has no way

of knowing this and as the episode ends, the real crew all wonder if they themselves are just images inside of some unimaginable technology.

And, of course, as I watch the show, I realize that they are inside of my box, the television set I observe.

Growing from the technology of cockpit simulation designed for aircraft pilot training, virtual reality is making its way into our technological world. In a virtual world generated by simultaneous computer-generated stereographic images – one to each eye of the perceiver and stereographic holographic sound to each ear – a person enters an environment of pure and often abstract information that can be seen, felt, heard, and touched. The touching is generated by placing one's hand or hands inside of electronic gloves that monitor and feedback spatial information to the computer which then in turn feeds back the information to the glove, sound system, and visual screens. The intent of the "user" is fed into the computer and it in turn feeds back information to the "user." The whole operation runs in an electronic loop nearly at the speed of light.

In essence the virtual reality, machine functions somewhat like we do, only in our case we carry the computer atop of our noses instead of outside of our bodies in a small but powerful microcomputer. Just as our brains are hidden from our sight, the technology for virtual reality is also invisible and carefully adapted to a person's activity so that he or she can behave in what seems to be a perfectly ordinary way.

Some time ago I had the chance to explore virtual reality. Although it seems ordinary at first, one quickly gets the impression that one has entered a very strange world indeed. For example, by merely moving one's hand in an arc, a la Merlin himself, it is possible to create objects floating in space that appear as real as actual objects and then to make them vanish. One can run one's hand or body through seemingly solid objects. One can fly as a bird, through a landscape as real as a computer-generated image of three-dimensional reality can make it. In fact, one can become a bird or undergo shape-changing as magical as any shaman's transformation. It is also possible to change one's own physical boundaries and go inside them. For example, one could look at a computer generated picture of one's own heart beating, but this time, see it from the inside rather than the outside.

The distinction between description (a view of objective reality) and process (a view of subjective reality) is capable of being completely eroded in cyberspace. For example, we do not change a book's words when

we read them. But suppose, by entering cyberspace, we become the characters in the book, actually experiencing the author's imagined intent. We may speak those words and, as a result of speaking them and hearing them and experiencing ourselves as the character or characters who speak those words, we may have an entirely different experience of the words spoken. The symbolic references by the author now become experiences.

The ability to enter into this technological space in this manner is really a new experience. We literally cross over a boundary that we normally cannot cross: the boundary separating self and the universe. Or perhaps we do cross this boundary in the world we experience as the "real" world.

WE SHOW YOU STEENKING REALITY

The latest physics tells us that reality is not made of stuff, but it is made of informational possibilities that can be coherent, so that possibilities appear to form into solid matter. When we talk about the dreams of the state or the nation for example, we are looking at this holographic/dreaming phenomenon at a more complex level of matter, but nevertheless, it is the same process we experience in the creation of our own individual realities. The dream is the place where the quantum reality becomes especially transparent, the mix of mind and matter becomes revealed.

We are speaking about levels of consciousness. From these different levels of reality, other sub-levels of reality form, producing a sense of the lower levels appearing more inert and mechanistic as when seen from a higher level.

Thus from a cosmic or universe view or planetary level, when looking back at the whole earth, we see a somewhat mechanical picture of the planet. From the earth's point of view, we see the motions of rivers and oceans as mechanical. From a national point of view we see the motions of people and their machines as mechanical and mindless. From a personal or human point of view we sometimes see each other as mechanical or try to reduce everything to mechanical terms. We see our own body parts as mechanical.

Hard reality is a question of levels. However, if we go too deep in our search for mind and matter, the levels begin to dissolve and atoms appear to be not things; they seem like ghosts, and we enter into an imaginal realm.

There are legends that have attempted to describe this. For example the Australian Aboriginal people believe that a Great Spirit dreamed all of reality, the

whole universe of it, into existence. They say that the land they walk is a reflection of this Great Spirit's dream, and when they walk this land, they become aware of the songs of their legends that resonate with the land itself. These songs resonate as song-lines in the earth and give them directions.

WE ALL KNOW THIS

If you look at human psychological and spiritual modeling you will find evidence of this "it's all a dream" idea. For example, Joseph Campbell in talking about this concept wrote: "Schopenhauer [...] points out that when you reach an advanced age and look back over your lifetime, it can seem to have had a consistent order and plan, as though composed by some novelist. Events that when they occurred had seemed accidental and of little moment turn out to have been indispensable factors in the composition of a consistent plot."

So, who composed that plot? Schopenhauer suggests that just as an aspect of yourself, of which your consciousness is unaware, composes your dreams, so, too, your whole life is composed by the will within you. And just as people whom you will have met apparently by mere chance become leading agents in the structuring of your life, so, too, will you have served unknowingly as an agent, giving meaning to the lives of others. The whole thing gears together like one big symphony, with everything unconsciously structuring everything else... one great dream of a single dreamer in which all the dream characters dream, too.

Everything arises in mutual relation to everything else, so you can't blame anybody for anything. It is even as though there were a single intention behind it all, which always makes some kind of sense, though none of us knows what the sense might be, or has lived the life that he quite intended⁵.

Chuang Tzu, the Chinese philosopher wrote: "Some day comes the Great Awakening when we realize that this life is no more than a dream. Yet the foolish go on thinking they are awake: Surveying the panorama of life with such clarity, they call this one a prince and that one a peasant – What delusion! The great Confucius and you are both a dream. And I, who say all this is a dream, I, too, am a dream⁶."

Our dreams do not appear to care whether they are pleasant, good, or evil. When we look at typical images of aliens from flying saucers, what do we see? The people are very thin and emaciated. They have white skins and thin bony arms and legs. They appear as very sick, starving or malnourished children. We all remember the Biafran tragedy in Africa, that war

created camps of starving and homeless people. These images are archetypal images of the neglected child who many psychologists recognize as a motif or archetype. We all have a neglected child inside of ourselves. We all have suffered the supposed abandonment of our parents whether this was a real abandonment or not. As young children, with underdeveloped egos, we at time felt so because we simply didn't have the intelligence to recognize that mom just went upstairs to fetch a glass of water.

Freud certainly wrote about this motif, and Jung would point to the frightening mother and abandoned child motif. So we all have such archetypal images constituting our unconscious minds. I believe that these images are deeper than just our personal experiences and that these images of archetypes rise from a more fundamental level of reality, which we might call the dream world. In this sense the dream is more fundamental than the objective reality.

When we dream we return to that reality in order to gain information about how to survive in this reality. But survival may not be as it seems from a single perspective. I, as a writer survive through you as a reader. Without you, I can't write for a living. Many themes begin to weave together as I write. I began to see the overlap of these themes as I starting writing. Where did I get the idea of *the dreaming universe*, for example, I don't know. One day I awoke and I said, "matter dreams."

In some way, hard core materialists would agree with this. The materialist philosophers believe that consciousness arises from matter. If so, how? From my point of view it doesn't matter whether you are a hard core materialist-scientist or soft core metaphysician who believes in God, or a Cartesian dualist who believes in the mind-matter dualism. If consciousness exists in matter, then matter is conscious. I am, therefore I think, or I think, therefore I am, becomes a tautology.

Going back to the images of starving children, are these just reflections of our primordial archetypal images? Or are they something more? Do the images of the children haunt us and then appear as extraordinary events in our dream and fantasy life because we are not facing the reality of the hardship of life on earth? Could these images be images of real people, not from other planets or galaxies – that would be too naïve – but from another reality, another level? Those persons only appear in accordance with a definite archetypal program.

Why do we have such images of apparent suffering? From a quantum physical point of view, we begin to see that the world of matter cannot be constructed

from certainty. There is none in the material world. Heisenberg's principle of uncertainty rules the world of matter. This means that in trying to deal with the real world, there will always be in our minds such things as doubt and uncertainty and even unclarity as to what is really the past and really the present. These cannot be defined perfectly.

When there is uncertainty there is also a mechanism that arises which we all know; we call it fear. Fear is, as I see it, the process of identifying with matter. When you identify with matter, the process of identifying is electronic. Electrons repel each other not only due to their like charges, but also to their intrinsic quantum property called spin. According to the *Pauli Exclusion principle* (PEP) they will not enter the same quantum state.

This tends to produce isolated structures and allows atoms to appear with different properties. In a sense, the PEP is responsible for the appearance of secular structures or the emergence of identity – the separation of self behavior from the not-self behavior. This tends to build within our own nature feelings of doubt, uncertainty and inferiority (Adler wrote about the inferiority complex). All of these reflections are attempts to build a science of life. But there is a peril in all of this.

The more we scientize life, the more we try to find causal reasons for everything, the more fearful it becomes. The more afraid we become. In the Russian film *The Scorpion's Garden* I saw in Saint Petersburg, the director Oleg Kovalov, using a clever overlap and juxtaposition of historical documentary footage of Russian life in the fifties and sixties together with a love story of a Russian soldier and woman, showed how the dreams and aspiration of the political system overlapped into the almost simple lives of the protagonists. Scenes of violence and mistrust in the big picture filtered into the story at every level. When the soldier becomes ill after eating a meal at his fiancée's home, he fears that he has been poisoned by an enemy of the state as his commanding officers tell him. The KGB is everywhere looking over his shoulder as he walks the streets, or so it seems. The film depicts very well the idea of the mass consciousness and the dream of this mass as distinct but yet overlapping with the life of the individuals that make up that mass.

There are scenes in insane asylums where the inmates appear to see this overlap and when asked about this they respond in what at first seems to be nonsense, but when heard carefully is just that: they are sensitive to the mass dream and their own individual dream.

We become afraid because people tell us what is real and what is not real. But we sense an inner conflict with what people tell us. We feel fear because we know that the viewpoint of, say, a political system is not consistent with our own view. The communist

party is not the answer to the world. The capitalist system is not the answer for the world's problems. Going to war is not the answer to the world. We know these things from some deeper voice inside of ourselves. What happens is that fearful images enter our minds, and we don't realize this. But if you have fearful images, they tend to come into reality: whatever you can imagine begins to appear as if we called them into existence.

We are creating these images as realities because the universe is ambivalent and paradoxical. It doesn't care what you produce. It doesn't say to you that you can't do this and you can do that. It is like a mother that loves all of her children: the ugly ones, the beautiful ones, the starving ones and the rich fatted ones, she doesn't care. It says whatever you create as imagery, so will it be. Why? Because at the core of the universe, at its most fundamental level, it is not solid stuff. It is not hard reality. It is capable of forming reality into whatever our images produce.

All political and social systems are produced this way. They are all magnifications of this basic misunderstanding of the nature of this hidden aspect of reality. If people could comprehend the imaginal element in all matter then what they envision would eventually come to pass. However, it may or may not come to pass at this instant, but it begins to manifest at the level of dreams.

In a way Freud was right. Dreams are wish fulfilling, but the level of the wish is not transparent. At the worst level, you cannot meet another person without projecting onto this person the fears and anticipations of your past conditioning. All of our images attach themselves to us and determine for us the way we see the world. We project these images out there. Even if you are not my image, if I treat you like my image eventually you begin to fight against my image, or you begin to capitulate and become my image. Relationships begin to form like this. People fall in love with what they imagine about each other and not with what each person brings to the relationship.

We live in myths, we live in trances, and we live in illusions that are hard to break free of. Meditation and perhaps Buddhist thought helps us to see what is really there because it helps us to free ourselves from our own imaginations. These spiritual teachings are designed to help us break free from any kinds of images: golden summers or wet cold icy winters, good or bad.

It is a dreaming universe. But if there is a great spirit dreaming all of this into existence, do I, the writer of this, believe in HIM or HER?

Let's say that the question of belief for me is at my present understanding the question: Am I able to

create within my life a sense of the presence of God? To believe something without any sense of presence of what one believes is little more than a brainwashing. It is like a child being told what he can and can't think or believe.

Is there a personal God? Is this God primordial, the origin of all existing things? Does one mean by this God a personal image like an old man with a white beard, or a primitive tribal picture from early Christianity or pagan religions? Or does one think of an impersonal image like the Chinese Tao or the cosmic order? Or is God a mysterious primordial person who gives powers to some and gives rules of behavior which aren't to be broken? The question is: Does God have a personality?


Rather than say I believe this, I would rather say that there is a basic mystery that is very deep. I know this mystery from my own experience of life when I am open enough to see it. If I am not open to see it, I go into fear and I won't see anything, I'll be in illusion. But when I am open to it, I sense this presence.

SENSING THE PRESENCE OF THE CREATOR

One day I had a particular strong impression of this Presence. I had taken LSD (this was back in the mid Seventies). I was in a beautiful area, the coastline of northern California. It is wonderful place. It was a perfect earth-day. Under the LSD I walked out into the sun and felt it beaming. I saw the sky glowing brilliantly blue. The clouds were faultlessly white. The ocean below me rushed onto the rocks. It was a brilliant Turner painting! But it was in full, live colors, and it had sounds that filled my brain and it had smells of salt air and the green grass sparkled in the sunlight and I smelled the freshness of the grass as if I were growing with it. I looked at this all very carefully. Then suddenly I began to realize that it wasn't real, it was all an illusion. A great feat of art. It was like a painting or sculpture. It was clear to me that not one blade of grass was out of place. Not one wave of the ocean below was wasted in its spillage over the rocks. Not one shade of light of the ever-changing blueness of the sky was random. It was perfect and it was ordered, and it was clearly a creation of a great artist or a great dreamer.

At this moment I realized that the world I saw was no longer compelling me to see it as immediately given and out there but as something that was painstakingly created. I felt not the presence of the overwhelming art scene I was immersed in, but the overwhelming sense of the artist. It was as if the artist had spoken to me. It was as if God had taken me by the hand

and said “So you really want to see? You really want me to take you beyond the illusion?” Then everything I was experiencing had tremendous meaning. Everything was significant. I was seeing into the artifact of the world and seeing it as an illusion, a creation and not as random nature.

I wasn't looking at this as if forces had created this blindly, nor had mechanics created it nor had blind nature created it. A clearly organized intelligent, feeling sensing like-myself, anthropomorphic being had created it. In that sense I felt the presence of God. In my normal life, I only feel this presence at rare times. I feel it with certain people who come into my life. We will be together and we will feel some kind of connecting energy, some kind of resonance, some kind of knowing, when I can't know this person, but there is a deep sense of this. When this happens to me I begin to feel this again. It is more a question of awareness rather than blind belief. My greatest joy of being alive is when I have that awareness. Then the fear is gone, the hole in my chest is healed. No sense of loss or abandonment, everything is peaceful. I try to kindle that with everyone I meet. It is not always possible. I seek it out in whatever form it will take. I can't predict what form it will take. I found that it does arise in many different parts of the world for many different reasons spontaneously. I can only take it that “I” am the creator of the universe, even if that is only a dream. 

¹ This quote was captured by Robert Anton Wilson (deceased) who was a friend of mine and Nick's, in his book: Wilson, Robert Anton. *Quantum Psychology* (Phoenix, AZ: New Falcon Publications, 1990:69).

² Wolf, F. A, *The Dreaming Universe: A mind-expanding journey into the realm where psyche and physics meet* (New York: Simon and Schuster, 1994, Reprint, Touchstone, 1995).

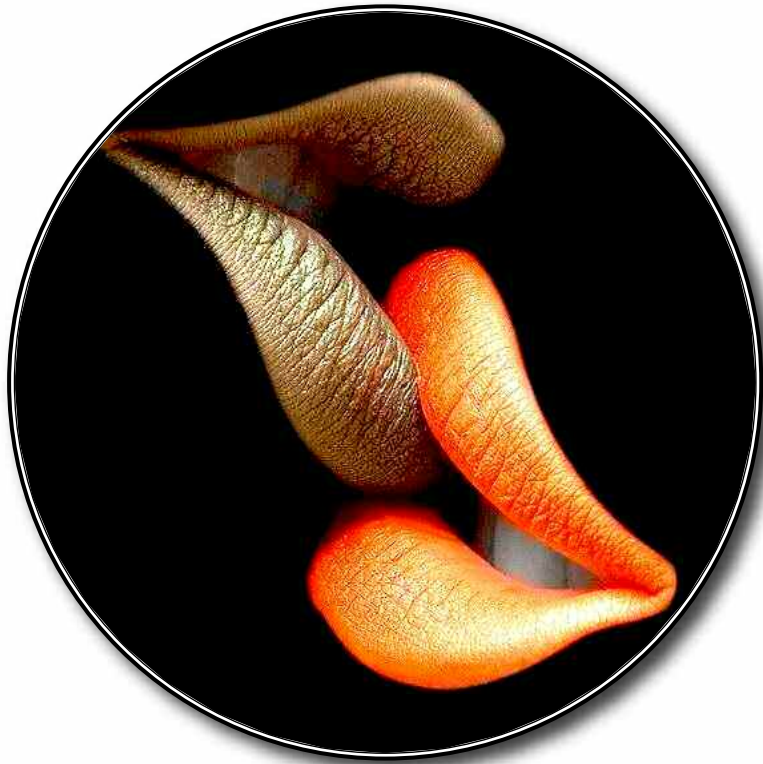
³ R. Bouso, “The Holographic Principle” in *Reviews of Modern Physics*, 74(3): 825-874. See also <http://xxx.lanl.gov/pdf/hep-th/0203101.pdf>.

⁴ M. Moyer, “Is Space Digital?” in *Scientific American*, 306(2): 30-37.

⁵ I don't remember where I got this quote. I believe it was from an interview he had with Michael Toms in the radio show *New Dimensions Radio*.

⁶ This quote is well known and is a part of the poem that Chuang Tzu wrote concerning his dream of the butterfly. Again, I don't remember where I got it from. Possibly Chuang Tsu, *Inner Chapters* (Trans. Jane English and Gia-Fu Feng, New York: Vintage Books, 1974: 45).





THE DESCENT AND ASCENT UPON THE LADDER OF CONSCIOUSNESS

T O R U S A T O



Toru Sato teaches Psychology at Shippensburg University in Pennsylvania, USA. It is not clear why, but he has an interest in consciousness and spirituality. Why he also has a general interest in the human development, interpersonal relationships, and the cyclical/rhythmic nature of life is also a mystery. Email: tosato@ship.edu.

If we are to teach real peace in this world, and if we are to carry on a real war against war, we shall have to begin with the children.

MOHANDAS GHANDI

As we grow up, the more our emotions are accepted and held with a loving presence by our caretakers, the more we feel that our emotions are valued and worth respecting. The more our emotions are accepted and held with a loving presence, the more we believe in ourselves to accept and hold our own emotions. This corresponds to the general experience of high self-esteem. It makes us believe that, "I am good enough to be loved and accepted as I am (with all of the emotions that I experience)." The higher our self-esteem, the more we develop courage to face not only all of our emotions but also the challenges that might make us experience these emotions in the future. This is the true meaning of "self-confidence". We never doubt that consistent sense of belonging that helps us maintain our emotional security.

It never hurts to think too highly of a person; often they become ennobled and act better because of it.

NELSON MANDELA

THE DESCENT

To show what good came from my experience I have to tell of things that were not so good.

DANTE ALIGHIERI

Realistically, however, maintaining a loving presence with our infants and young children regardless of what emotion they may be experiencing is easier said than done. In fact, it is not possible to have 100% of our emotions accepted and held with loving presence by our caretakers all of the time simply because caretakers are human and it is human to be anxious, fearful, and insecure. As we may know from our own experiences, when we are anxious, fearful, or insecure, maintaining a loving presence for others is often pushed down to the bottom of our list of priorities. Even though this happens to all of us, there are still individual differences in how much our emotions are accepted and held with loving presence by our caretakers. As a general rule, the less our emotions are accepted and

IN MANY PARTS OF THIS WORLD, WE MAKE GREAT EFFORTS to create peace through political efforts. In many cases, this is a necessary intervention that saves many lives and can be extremely successful for at least a temporary period of time. As many sages throughout history have suggested, however, true peace can only come about when there is peace inside the hearts of the individuals involved. The purpose of the present article is to explore this inspiring notion.

As we live our lives, we embark on a beautiful journey. This journey involves a difficult but necessary descent and an eye-opening ascent upon the ladder of consciousness.

The separation from unity is the descent of the angels upon the ladder of consciousness.

The return to unity is the ascent of the angels upon the ladder.

The descent is good.

*But the unity that comes is expressed diversity
But in diversity there would be no concept of separation.*

GARRETT DUTTON

Let us start where we all start, the beginning of our lives. As infants and young children, we need 100% of our emotions to be accepted and held with loving presence by our caretakers. As the well-known psychologist, Carl Rogers, claims, in an ideal world, we would all be raised in an environment of unconditional positive regard, an environment in which we are accepted and loved for whom we really are¹. Although this need is often overlooked, it is almost as important as our need for oxygen.

held with a loving presence by our caretakers, the more we feel that our emotions are not worth respecting and valuing. When we feel that our emotions are not worth respecting and valuing, we believe that we are not worth respecting and valuing. This is the essence of low self-esteem. We believe that, “I am not good enough to be loved and accepted as I am (with all of my emotions).” The lower our self-esteem, the less we believe in ourselves to face difficult emotions. Moreover, the less we believe in ourselves to face difficult emotions, the less we believe in ourselves to face the challenges that might make us experience those difficult emotions in the future.

*Most of the shadows of this life are caused
by standing in one's own sunshine.*

RALPH WALDO EMERSON

As we are human, we inevitably experience difficult emotions. Because of our experiences with our caretakers discussed above, some of these difficult emotions are desperately avoided, denied or repressed. Unfortunately, these attempts are met with limited success. Even with our best efforts, these emotions creep out of our subconscious minds as our shadow side desperately looking for other people to accept and hold these difficult emotions with a loving presence. Our shadow side often appears to people who are very close to us such as parents, romantic partners, siblings, and our own children. If these emotions from our shadow side are not accepted by those people very close to us, they may surface in our other less intimate relationships such as with friends, people at work, and often may extend to political, cultural, and religious groups and leaders. Because we feel that these emotions need to be accepted and held by someone, our shadow side does whatever it takes to accomplish this mission. If our emotions are not accepted and held by these people, they will often become our enemy. We separate ourselves from them, blame them, and in some cases, act aggressively against them. The more this happens, the more we lose contact with the fundamental truth that we all belong to each other.

*The biggest disease today is not leprosy or tuberculosis
but rather the feeling of not belonging.*

MOTHER TERESA

This creation of an enemy is essentially a projection of making ourselves the enemy by victimizing or blaming and punishing ourselves. We cannot trust ourselves to accept and hold these emotions so we blame ourselves. Deep down in our subconscious mind, we believe “I am not good enough.” Because admitting to this is painful, when

we find that we cannot trust others to accept and hold our emotions, we blame and victimize others as a temporary escape from the unpleasantness of feeling “I am not good enough.” We turn our belief of “I am not good enough” into “You are not good enough.” Perhaps it is not an overstatement to claim that this is the basis of all hostility, aggression and violence in life.

*The worst thing about fear
is what it does to you when you try to hide it.*

NICHOLAS CHRISTOPHER

As alluded to earlier, none of us have 100% of our childhood emotions accepted and held with loving presence by our caretakers. This is why Carl Rogers states that none of us are raised in a perfect environment of unconditional positive regard². Therefore, understandably, all of our caretakers have developed a shadow side to some extent. As mentioned previously, this shadow side surfaces in many of our relationships including our relationships with our own children. In the moments where this shadow side of us dominates our personality, we cannot accept and hold the emotions of our children with a loving presence. Because we are often desperate to have our own emotions accepted and held with a loving presence by others in these moments, we cannot maintain a loving presence for others. This, unfortunately and inevitably, leads to the development of the shadow side in our own children. Therefore, to some extent, we all develop a shadow side believing that, “Some of my emotions are not worth respecting and valuing and therefore some parts of me are not worth respecting and valuing” and “Some parts of me are not good enough to be loved and accepted.” In some very unfortunate cases, our shadow side may be so strong that we believe that “All of my emotions are not worth respecting and valuing and therefore I am not worth respecting and valuing” and “I am not good enough to be loved and accepted as I am.”

*The greatest burden a child must bear is the
unlived life of the parents.*

CARL JUNG

THE ASCENT

Even though all of us have developed a shadow side, there is no need to despair. In fact, there is still an immense amount of hope. We can unlearn these beliefs that are subconsciously dwelling in our shadow side. To do this we must learn to trust ourselves to accept and hold our own emotions with a loving presence. We must do this with our past repressed

emotional experiences and any emotions that arise in the moment and uncover the beliefs that are associated with these emotions buried deep in our subconscious minds (e.g., “I am not good enough to be loved and accepted as I am”). Once these beliefs are brought up to the conscious level of our minds, we begin the process that is sometimes referred to as “reparenting.” We learn to accept and hold our own emotions with a loving presence much like we wished our own parents would have when we were younger.

Perhaps all the dragons in our lives are princesses who are only waiting to see us act just once, with beauty and courage. Perhaps everything that frightens us is, in its deepest essence, something helpless that needs our love.

RAINER MARIA RILKE

There are many therapeutic mindfulness practices that are focused on this process of “reparenting.” Even though a thorough explanation of these practices is beyond the scope of this article, the important element of this process involves a shift in identity. We stop identifying with our ego, a separate individual self that needs to be protected, and we begin to identify with the spaciousness that holds our emotions with a loving presence. When we identify with the spaciousness that holds our emotions with a loving presence, we relate to our emotions in an entirely new and liberating way. Instead of being overridden by our emotions, we now have a choice of how to relate to it. We realize that we are not our emotions. We are the spaciousness that holds our emotions as they come and go. We can choose to run away from our emotions or we can choose to stay with them by holding them with a kind of loving presence that is often experienced by a caring mother holding her crying infant. As we sit quietly holding our emotions with a loving presence, we soon discover that each emotion will arrive, stay, and then leave after it has fully lived its life inside of us. Just like an infant who is lovingly held by his or her mother will eventually feel comforted and stop crying, every emotion passes as long as we allow it to come in and move through.

Develop a mind that is vast like space, where experiences both pleasant and unpleasant can appear and disappear without conflict, struggle or harm. Rest in a mind like vast sky.

MAJJHIMA NIKAYA, Buddhist Scripture

Theoretically, this is what happens in the process. Experientially, however, most people will require substantial support and guidance from an experienced spiritual teacher, healer, or therapist to help him or her through this process (interested readers may benefit from reading some of the books listed at the end of this article). By “reparenting” ourselves,

we develop the capacity to accept and hold our own emotions. This is truly what it means to become independent, responsible, and empowered as a human being. This is what it means to truly “own” our lives, and become an adult. In many cultures, the rites of passage into adulthood were initially intended to function as catalysts in this unfolding process of consciousness. Through this process, we learn that we do not need to rely on others to accept and hold our emotions. We learn to trust ourselves to accept and hold any emotion that arises. As our consciousness unfolds in this process, we learn that, “Difficult emotions are a part of the human experience and all of these experiences (not just the pleasant ones) are worthy of love, care, and respect.” When this understanding finally sinks into the depths of our consciousness, we truly begin to believe that, “Regardless of what emotions I experience, regardless of what others say or do, I am always worthy of being loved and accepted as I am.”

The curious paradox is that when I accept myself just as I am, then I can change.

CARL ROGERS

Although being able to accept and hold 100% of our emotions on our own would be ideal, this is much easier said than done. In childhood, we need 100% of our emotions to be accepted and held by others (mostly parents and other caretakers). Ideally in adulthood, it would be nice to have the capacity to accept and hold 100% of our emotions on our own. Realistically, however, it might be more prudent to aspire to accept and hold at least 75% of our emotions on our own. Unless we can reach a state of complete ego-transcendence, we might still need others to accept and hold some of our emotions. In many ways, this is perhaps the emotional function of family, friends, and community.

I will come to you, my friend, when I no longer need you. Then you will find a palace, not an almshouse.

HENRY DAVID THOREAU

Being able to accept and hold our emotions with a loving presence is of vital importance not only to ourselves but also to the world around us. This is because the more we can accept and hold our own emotions with a loving presence, the more we can stay fully present with others by accepting and holding other people’s emotions with a loving presence. The spaciousness that holds our own emotions with a loving presence is the very spaciousness that allows us to hold other people’s emotions with a loving presence. As suggested earlier, this type of spaciousness is the key ingredient for raising children who can trust themselves to accept and hold their own emotions with a loving presence.

Because of this, children who are raised in this type of spaciousness by their caretakers are more likely to have the natural confidence to accept and hold the emotions of others with a loving presence. When we reside in this spaciousness, we are at one with the true spirit of love and peace. This is perhaps why the more inner peace we experience, the more outer peace we can create.

The moment you see how important it is to love yourself, you will stop making others suffer.

SAMYUKTHA NIKAYA, Buddhist Scripture

In addition, this type of loving presence with others is essential not only in human relationships but also between us humans and the many forces of nature that surround us. Awakening to this reality is not only a prerequisite to mending the rifts between many of the political, religious, and cultural groups that we see today but also to healing this planet. When we identify with the spaciousness that holds our emotions with a loving presence, we also develop the capacity to stay lovingly present and compassionate with all forces of nature. The day we can be of service with this kind of loving presence and compassion toward all that exists may be the day we will have truly mastered the art of peacemaking.

Work is love made visible.

KHALIL GIBRAN

I thank you sincerely for allowing me to share my thoughts with you. I wish you all a wonderful journey descending and ascending upon this challenging but beautiful ladder of consciousness.

May we awaken to see our own shadow side...

May we unlearn our fears of not being accepted and held with a loving presence...

May we awaken to our own true nature, the spaciousness that holds all with a sacred loving presence...

May we learn to stay present with both ourselves and others and so that we can find true peace and compassion...

... NAMASTE ...



REFERENCES

ROGERS, C. R. (1959). "A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework", in S. Koch (ed.), *Psychology: A study of a science. Vol. III. Formulations of the person and the social context*: 181-256 (New York: McGraw Hill).

RECOMMENDED BOOKS ON THERAPEUTIC MINDFULNESS PRACTICES

BRACH, T. (2004). *Radical acceptance: Embracing your life with the heart of a Buddha* (New York: Bantam).

KABAT-ZINN, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness* (New York: Delta).

WELWOOD, J. (1997). *Love and awakening: Discovering the sacred path of intimate relationship* (New York: Harper Perennial).

WILLIAMS, M., TEASDALE, J., SEGAL, Z., & KABAT-ZINN, J. (2007). *The mindful way through depression: Freeing yourself from chronic unhappiness* (New York: Guilford).



¹ Rogers 1959, *A theory of therapy*: 224.

² *Ibid.*: 226.

EVOLUTIONARY ETHICS

G E O F F F I T C H



Geoff Fitch is founder and faculty at Pacific Integral, and has been creative leader, coach and educator for over thirty years. He holds Masters of Transpersonal Psychology from the Institute of Transpersonal Psychology and BS in Computer Science, magna cum laude, from Boston University.

BACKGROUND

WE LIVE IN A TIME OF SEEMINGLY UNPRECEDENTED peril. In recent decades the challenges we face appear to have taken on greater and greater proportions, and present themselves with a complexity that forces us to think and act globally as a species, something we seem utterly unable to do. While the best of our global institutions make valiant attempts to articulate the issues and organize solutions, such as the millennial development goals¹, it seems that our best attempts fall far short of being sufficient to address these challenges. Global problems such as climate change, infectious disease, war, poverty, financial instability, cyber warfare, and environmental decline occupy some of our greatest minds, yet still we cannot provide even the basic necessities of life for one billion of our population, while some leading scientists point an imminent, irreversible collapse of environmental systems on a planetary level² that threatens the very continuation of the human species. While these conditions become clearer and clearer each day, our leaders and institutions seemed blinded by narrowness of vision and mired in political gridlock and self-interest, while the populace seems largely anesthetized from concern by popular media and culture.

While this predicament is our greatest challenge as a species, it also seems to represent an unprecedented opportunity. There is something profoundly hopeful about this situation. In each of these perceptions lies equally an intuition of resolution and transcendence. Awaking to an evolutionary understanding of matter, life, mind and spirit³ we can see ourselves as part of a great timeless story⁴ and recognize

this moment as an evolutionary turning point, and opportunity to individually and collectively transcend the patterns that have manifested these challenges and bring about a new consciousness that not only moves beyond these great problems, but brings about a more beautiful and equitable future for all. At a concrete level, we see unparalleled growth of technological solutions, inter-connectedness, new organizational forms, and spiritual understanding. We actually have the raw material of what we need, it seems (even if we are not yet realizing those solutions.) Even more so, we have the potential to remake ourselves anew and in the process to sanctify existence.

These extremes of perspective, of cataclysmic breakdown and human transcendence, are evocative but ultimately unsatisfying and distracting. The human experience has always been one of cataclysm and transcendence. As our consciousness and complexity expands⁵ at each stage of development, we have faced what has seemed like threats of annihilation at times. While the extinction of a tribe or nation may not seem as cataclysmic as our present day threats, from the perspective of the people facing them, they may have been just as ominous. While at this time we seemed to have run out of rope (or planet), there is a hubris in this perspective that does not acknowledge the limits of our knowledge that repeatedly reveals itself to us in hindsight. The question is perhaps not how bad or good is it. The more important question we face might be how can we move forward with and toward the greatest wholeness? How to we presence our action and awareness such that it serves the higher future that calls us⁶? This paper explores the ethical potentials of the challenges we face today, in light of our understanding of the evolutionary development of consciousness, explored elsewhere in this issue, and examines ethical principles founded on the essential conditions of the cosmos - evolution and non-duality.

EVOLVING UNIVERSE, EVOLVING MIND

In this issue, O'Fallon describes a spectrum of evolution of consciousness that includes human development and spans the great domains of concrete, subtle, causal and non-dual worlds⁷. This spectrum includes

and builds on the developmental stage models pointed to by Wilber⁸ and the many theorists his integral framework references and integrates. While each theory of development typically explores a given line, cognitive development, and then self or identity development, tend to lead other lines of development. Since the stage of self development determines who one takes one's self to be and what one takes the world to be, we can say that these stages are constructive, in that they describe structures that construct, or co-create the worlds in which one believes one to exist. (This perspective also arises as developmental theories transcend and include social constructivist and later, construct-aware perspectives⁹). Thus, theories of self-development describe developmental stages, but they also indicate that a developmental stage makes possible a particular worldview, which would be foundational to a theory.

EVOLVING ETHICAL SENSE

Given this understanding, it is important to consider that any ethical sense itself can be seen as arising developmentally. Most famously, Kohlberg¹⁰ built on Piaget's theory of cognitive development to describe six stages of moral development. These six stages consist of two pre-conventional stages, which are ego-centric and oriented towards the direct result of action for the self; two conventional stages, which are socio-centric where the social norms and expectations guide actions; and two post-conventional, in which actions are guided by one's own ethical principles, which may differ from those of society. Kohlberg's original six levels spanned a developmental spectrum up through what O'Fallon¹¹ has called the subtle stages, those not yet including transpersonal perspectives.

Kohlberg and Power did, however, speculate about a seventh stage¹², which arises out of a mystical understanding and is seen as one sees one's self in relationship to the unity and to the cosmos. Kohlberg refers to this new perspective as an ethical stance that is "cosmic" or "infinite" and points out that it moves beyond, but includes earlier principled perspectives orienting toward justice, but becomes grounded in Agape, or a universal embracing love.

Wilber¹³ has also suggested that beyond the post-conventional territory, lies the ethical principles that reflect an expanding scope of care, arising out of an expanding scope of awareness, with a post-post-conventional stage evoking a concern for all humans. This includes a bodhisattvic stage comprising care for all sentient beings, and a non-dual stage spanning concern for all of manifestation. Wilber suggests a "basic moral intuition" which calls

for care for the greatest depth for the greatest span. Both Kohlberg and Wilber acknowledge in post-post-conventional moral stages, one might refer to principles, but action is not so easily determined – there are no rules, *per se*, which is reflected in Wilber's use of the term "intuition."

As we develop, our ethical understanding evolves, touching greater and greater scopes of care, and ultimately has us meet the dualistic mind at its core, calling us to an ethics that does not divide, that is whole. As such, we must admit it is a kind of fool's errand to construct such an ethics in distinctions, but something we can't fully escape. A deeper, more cosmic ethical intuition begins to step into the territory where words fail and where paradox is only an elusive scent of a deeper unity. How might we consider ethics, from an assumption of prior unity¹⁴, from the perspective of the whole?

EVOLUTIONARY FOUNDATIONS

We can at this time look to how certain foundational, universal conditions inform how an evolutionary ethical sense unfolds, and how we may now clarify ethical principles that span the spectrum of humanity.

First, that there is, as we have seen, a developmental spectrum that points to great worlds or tiers of being, part of what Wilber called the "great chain of being"¹⁵. This territory of existence, through which evolution expresses itself is expressed as major tiers of manifestation: gross, subtle, causal, non-dual.

Second, there appears to be a foundational energy or condition of the cosmos, which is the impulse to evolve towards higher forms, ultimately to unconditioned Unity, God, Spirit itself. This has been described as the force of Eros (as seen from the many reaching for realization) and Agape (as seen from Spirit, coaxing manifestation towards realization of its true condition, as Spirit).

Third, that Spirit, the ultimate, unconditioned reality is both the goal of evolutionary cosmos, and the already, always existing condition of the Cosmos as it is. Reality exists as the paradoxical relative and absolute nature of existence, which is both two and not two.

Fourth, awareness is the foundation of this growing evolutionary process.

AWARENESS AND ACTION

Ethical action is action towards the good, enacting "for the good of" and arises out of awareness of what is and a sense of what the best expression of the good is in the moment. As we evolve, one can only act in the context of what one sees, so all ethical

action is constrained by our conception of self and world. For example, at an egocentric level we are aware of the self and its needs, and act for the good of the self. From a later perspective, this may not be seen as “ethical” but surely is from the egocentric self. As one then becomes aware of one’s concrete collective an ethics arising out of social norms takes place. As we progress in our evolution to subtle levels, we become first aware of choice, and consciousness of ethics as a process arises, and we begin to choose ethical principles to guide our actions. When we become aware of awareness itself at the causal level, the construction of ethics arises, along with eventually a value and care of the universal whole.

All along the chain of evolution, the scope of our ethics is our sphere of concern (with which we identify), which arises as some portion of what we are aware of. This fundamental lever of awareness first brings forth the conditions of consciousness and then the conditions of the heart, the field of care. Finally, action manifests as the conditions of the body – the gross, subtle or causal body. This arc of Agape, the descent of higher knowing into intention and action, forms the manifestation of free ethical choice, and is founded on awareness.

Ethical choice also arises in the tension of the non-dual nature of reality, ultimately expressed as the relative and absolute dimensions of truth, but also in every kind of polarity formed in consciousness and form. Everything thing is continually challenged by this paradox of the impulse towards spirit and the intuition of the always already present reality of Spirit. As the self contracts from this reality, it gives birth to infinitely many dualities, each of which carry this tension. Each of these dualities holds and expresses the tension of manifest reality’s unresolved realization of the two/not two nature of existence.

This confrontation with the two / two not nature of our predicament informs the evolutionary process, which takes shape in its vertical dimension through Eros, as a process of transcending and including, of the repeated attempt to bring two together as one. This is the great dialectical process that is ultimately revealed as one side of the coin. The Agape side of this coin, the embrace, takes up residence as the ever-present reality of unconditioned Spirit in the embrace of all, which takes up form in evolutionary process as the involutory descent of spirit, the holding and embrace of all that is contained within conditional awareness. It is in its root condition all that is contained in and arising out of unconditioned awareness, the ground of the embrace of Agape, felt in each individual as Eros the impulse to transcend *and* Agape, the impulse embrace, include.

EVOLUTIONARY ETHICAL INTUITIONS

In short, the cosmos is evolving through concrete, subtle, causal and non-dual worlds; the arc of this evolution is the energy of Eros and Agape, or Love; reality is both two and not two, paradoxically moving towards Spirit itself and is always already Spirit itself, the absolute unconditioned Ground of Being. Further, ethical awareness arises as our developing field of consciousness and within that our field of care, part of which we are aware, and our sense of the wholeness of what otherwise appears as dualities. Ethical action evolves out of a sense of what is good, and as the arc between our ascending awareness and our descending, embodied action and presence.

From this more universal perspective of ethics, we can consider some intuitions that may inform our actions:

- ~ Consciously and deliberately engage in individual and collective development, in its full complexity and richness.
- ~ Practice more deeply into our embodiment, commit to and engage in courageous action, compassion and understanding, as an embodied vehicle, an expression of the already present spirit, as we best sense it.
- ~ Recognize the process and dynamics of evolutionary ethics arises in the context of the contraction from the two/not-two, the dualistic mind, and is already arising as that conflict, therefore consider paradoxical dualities, some very subtle, in all life and action (and seek to transcend this condition.)

REFLECTIONS ON PRACTICE

EXPANDING SCOPE OF CARE

Our understanding of the evolution of consciousness reveals a profound spectrum of development that unfolds greater and greater spans of awareness and care. We as human beings see our field of vision and love expand from self, to family, nation, society, and other subtle collectives. We may expand beyond this to care for all of humanity, all living things, the Earth, or beyond that to all of evolving existence itself. The first intuition of a cosmic, evolutionary ethics is that it is not a static process, but an unfolding horizon, and as such always insufficient, always opening, and vast unfolding and revealing field of love. We can consciously, deliberately open to that openness, and imagine together greater spheres of care in which we all reside, and to accept that greater embodied realization of those spheres of awareness takes time to unfold as our evolutionary process.

ETHICAL DUALITIES, ETHICAL NON-DUALITY

Practice an ethical awareness and action that continually and paradoxically is at once two/not-two, foundationally

- ~ two not two of Eros and Agape (reaching, connecting, transcending developing towards Spirit itself as the radiant illumination, embrace, compassion, support as sacred incarnate);
- ~ two not two conditioned reality and Unconditioned Spirit (the inevitable evolutionary/involutionary arc towards the Unconditioned whole, as the irrelevance of Evolution, the unnecessary movement, the always already source Condition, ground, emptiness);
- ~ interior/exterior – individual/collective or three/not-three of Ethics, Beauty, and Truth (Perichoresis, interpenetrating oneness of aesthetic, ethical, philosophical/heart, body, mind facets of unity).

An evolutionary ethics must eventually situate itself in a oneness that reaches into the foundations of development, into the core of the dualistic mind. These fundamental dualities that form our ethical intuition can first be recognized, then interwoven, then fundamentally transcended. To do so, liberates their full potential by relieving the inherent conflict they pose in the dualistic mind.

There arises, as we face the potentials of this moment, a strong impulse to bring about change. Beyond addressing the problems we see, this evolutionary ontological restlessness is always calling us to greater wholeness. With the birth of rational consciousness, the Enlightenment brought about the notion of scientific progress. Now, as we are aware of larger systemic contexts, some have noted we are now becoming aware of evolution itself and as such can engage with it as conscious participants¹⁶. This impulse expresses one of the two great forces of the cosmos identified by Wilber, the force of Eros¹⁷, which is complemented by Agape, the reaching embrace, the gentle pull of the divine on all manifest form towards greater wholeness.

While this involutionary/evolutionary dance moves toward “Source and Suchness of the entire display”¹⁸ it is also, already that everpresent ground, already the display of Spirit itself. At some point in its development (marked by what O’Fallon refers to as our transition into the causal stages¹⁹) one becomes aware of awareness, one recognizes one’s ever-present ground of Being, and eventually the prior condition of consciousness as the expression of all form. But this recognition reveals not the fruition of evolution, but its great paradox, and our next ethical polarity. That is, the entire Kosmic dance is moving towards the realization of Spirit, while always already being Spirit itself.

We are then faced with a seeming dilemma. As spirit, we both reach for greater depth and embrace greater span. We both are evolving towards greater wholeness, to Wholeness itself, while always already being that Wholeness in every moment. These dilemmas, or polarities, held in contradiction lead us withhold our fuller expression, and are paradoxically the unfolding towards our further expression itself.

How do we transcend these dualities? The great traditions have pointed to foundational dualities, facets of unity, and their unification in a relative expression, and transcendence in an absolute sense. Several theorists have noted that a perspective on a polarity can evolve from more polarized to more integrated forms^{20,21}. O’Fallon notes that one can first see just one side of the polarity, then a choice (either/or), then co-existence (both/and), then interpenetration. Ultimately as we integrate polarities in an embodied way, we have an opportunity to transcend them in a superordinate perspective. An elegant expression that spans the developmental spectrum is Kesler’s Integral Polarity Practice²².

What foundational polarities might we consider in the context of our evolutionary ethical action? We consider several here:

EROS & AGAPE

While each part reaches for transcendence, bringing together through the force of Love as Eros, into greater and greater wholes, we simultaneously embrace each part as Love as Agape. This simultaneous union of masculine and feminine as one gesture, two faces of Love is the expression of our ethical sense.

ABSOLUTE & RELATIVE

We may see development in terms of evolving levels of maturity or growth, yes this is not the whole truth. We may alternatively hold an understanding that things are unconditionally, innately perfect as they are. Situated in the perspective of the innate divinity of existence, we naturally and spontaneously offer unconditional, undiscriminating respect for all. On the other hand, seeing through the perspective of evolutionary development, we see that there is an earlier and a later, a more or less mature or evolved condition. This polarity is an expression of the underlying condition of reality as both a play of manifestation, returning to Spirit, and the already, always condition of reality as Spirit – both evolving and perfect.

ONE / MANY-WHOLE

It is possible, as we engage in our own development, that our concern with development may actually paradoxically contribute not only to the transcendence of the ego, but the calcification of the ego. By

codifying the way we can transcend and become more enlightened, the ego may latch onto the model and inflate itself with spiritual pride or spiritual materialism. While this may be exacerbated by the developmental model, this issue is recognized by other spiritual traditions as an essential concern with growth that transcends ego²³. Similarly, in any evolutionary context, any self-aware part can be unconscious to the many or the whole, and become lost to what Ferrer identified as intra-subjective reductionism and subtle Cartesianism²⁴, perpetuating the isolation of these experiences to the domain of the personal and subjective, and seeing them in terms of “subjects” having “experiences”. This dilemma can be seen through the duality of individual and collective, or one and many, which gives way to one occasion, in which no one or whole can be seen as solely causative, responsible, or rewarded.

SELF / NO-SELF

Next, we consider that the assumptions arising out of a concept of permanent self, may be reinforced by a developmental model based on them. The simple act of the Zen student turning over his soup bowl at the end of the meal symbolizes impermanence, and ultimately the impermanent nature of self. In this simple act, we remember that this may be our last meal. We avoid reinforcing the illusion of the permanent nature of the self, by letting go of any condition we ascribe to it. We don't assume one is an individual living a life and that one can look forward to many such bowls of soup in the future and all that implies. In terms of practice, we don't seek to acquire, to build up concepts of self in practice and dharma – ultimately practice is seen paradoxically and the realization of pure practice is non-practice (Brown & Thurman, 2006).

What does this suggest about developmental work? We might consider that without this understanding, the interplay between developmental approaches and an underlying concept of the self as permanent (and therefore developing), may contribute to the bolstering of that sense of self, as much as its transcendence. As much as this is leading to enlightenment, it is also most surely leading to death. Faced with this knowledge, we see that the structures we pay attention to will at the very least completely transcend our individuality and that what we take to be ourselves and will be gone in a few short years. Even the larger evolutionary trajectory of the universe or Kosmos as we understand it, faces the same fate and arises as the same ground. Fully realized, this will do a great deal to temper the excessive importance we place in our models of development and our selves.

ETHICS / BEAUTY / TRUTH

As Wilber has pointed out the dualities of individual and collective, interior and exterior, reveal the great three – Truth, Beauty and Goodness, which suggest that this whole topic of ethics is just one aspect revealed through the perspective of Goodness. Of the many ways to consider ethical action in light of and as its negations, we consider this Perichoresis, or interpenetrating dance, of what Aurobindo called the aesthetic, ethical and philosophical mind.

SUMMARY

How might the union of these fundamental polarities express themselves at the emerging grooves of in the Kosmic field of evolution (while being already, fully, exhaustively real?) We can understand our actions to bring about the next expression of our world, as fully, and utterly and expression of an embracing Love, that reaches, includes and sanctifies every thing as it is. We can realize our impulse towards higher, fuller expressions as the One, already-perfect ground Condition of all. In doing so, we fully liberate both spectrums of these polarities – an unconstrained, radical responsibility for manifest form expressed fully, wildly without reservation towards a brighter fulfillment of light and love, while also realizing and reflecting the utter perfection of all forms, and the consequent emptiness of the dance, the divine Irrelevance of evolution – a limitless respect and compassion free of any entanglements, owned by no one and no thing.

Evolution, it seems, is inevitable. It seems that regardless of what we do, the cosmos is sliding toward enlightenment. As we awaken to this realization and become aware of awareness, the great cause and effect, we are inspired to become, ultimately required by our self-recognized nature, to be conscious participants in the process. As we do that, we need to understand the deeper non-dual nature of this cosmic restlessness, lest we become further divided against ourselves. Ultimately, the cosmos is one and as such cannot be divided. Our efforts to transform, without this understanding, will ultimately collapse on the weight of their own contradictions. To transform our condition, we must fall utterly and irrevocably in love with it, every part of it, as we say goodbye to every part of it in every moment. Even as we lean towards this deeper unity, we can become aware of and embrace the concrete, subtle and causal polarities that are surface reflections this division of mind. In doing so, we practice (inevitably and unnecessarily) the movement of transcendence, heal divisions, encounter the underlying ground of being, and become as one.

In doing so, in every moment and in whatever way we can, we are laying cosmic grooves that become new evolutionary forms. These involutory givens, as Wilber calls them²⁵, Eros/Agape, the ineffable ground of ever-present Spirit form the ground movements of our being, and as we become aware of our own awareness, we become conscious dancers of this dance. As we do this, we lay the ground of expressions of these forms: new evolutionary individual and collective patterns, new expressions of the stages of our development, new emergent forms of consciousness. We are as Sheldrake postulated, creating morphogenetic fields or deep cosmic habits, which form the foundation of a new world, a new evolutionary moment²⁶. ☪

-
- ¹ United Nations 2012, *2015 Millennium Development Goals*.
² Barnosky, et al. 2012, *Approaching a state shift in Earth's biosphere*.
³ Aurobindo 1985, *The Life Divine*.
⁴ Swimme & Berry 1994, *The Universe Story*.
⁵ Cook-Greuter 2002, *Ego development*.
⁶ Senge, Scharmer, Jaworski, & Flowers 2005, *Presence*.
⁷ O'Fallon 2012, *Development and Consciousness: Growing up is Waking up*.
⁸ Wilber 2006, *Integral spirituality*.
⁹ Cook-Greuter 2002, *Ego development*.
¹⁰ Kohlberg, Levine, & Hewer 1983, *Moral stages*.
¹¹ O'Fallon 2012, *Development and Consciousness: Growing up is Waking up*.
¹² Kohlberg & Power 1981, *Moral development, religious thinking, and the question of a seventh stage*.
¹³ Wilber 2000, *Integral Psychology*.
¹⁴ Adi Da 2008, *Not-Two Is Peace*.
¹⁵ Wilber 2001, *Sex, ecology, spirituality*.
¹⁶ Hubbard 1998, *Conscious Evolution*.
¹⁷ Wilber 2012, *Excerpt A: An Integral Age at the Leading Edge*.
¹⁸ *Ibid.*
¹⁹ O'Fallon 2012, *Development and Consciousness: Growing up is Waking up*.
²⁰ Cook-Greuter 2002, *Ego development*.
²¹ O'Fallon 2010, *The collapse of the Wilber Combs matrix*.
²² Murray & O'Fallon 2010, *A Perspective on Kesler's Integral Polarity Practice*.
²³ Trungpa, Baker, Mipham, & Casper 2008, *Cutting Through Spiritual Materialism*.
²⁴ Ferrer 2000, *Transpersonal knowledge*.
²⁵ Wilber 2012, *Excerpt A: An Integral Age at the Leading Edge*.
²⁶ Sheldrake 2009, *Morphic Resonance*.

REFERENCES

- ANTHONY D. BARNOSKY, E. A. (2012). "Approaching a state shift in Earth's biosphere", *Nature*, 486.
 AUROBINDO, S. (1985). *The Life Divine*: (Silver Lake, WI: Lotus Press).
 COOK-GREUTER, S. (2002). *Ego development: Nine levels of increasing embrace* (Wayland, MA).

- DA, A. (2008). *Not-Two Is Peace: The Ordinary People's Way of Global Cooperative Order* (Middletown, CA: Dawn Horse Press).
 FERRER, J. (2000). "Transpersonal knowledge: A participatory approach to transpersonal phenomena", *Transpersonal knowing: Exploring the horizon of consciousness* (New York: State University of New York Press).
 FORMAN, M. D. (2010). *A guide to integral psychotherapy: Complexity, integration, and spirituality in practice* (Albany, NY: State University of New York Press).
 HUBBARD, B. M. (1998). *Conscious Evolution: Awakening the Power of Our Social Potential* (Novato, CA: New World Library).
 KOHLBERG, L., LEVINE, C., & HEWER, A. (1983). *Moral stages: a current formulation and a response to critics* (Basel: Karger).
 KOHLBERG, L., & POWER, C. (1981). "Moral development, religious thinking, and the question of a seventh stage", *Zygon*, 16(3).
 MURRAY, T., & O'FALLON, T. (2010). "A Perspective on Kesler's Integral Polarity Practice", *Integral Review*, 6(2).
 UNITED NATIONS. (2012). *2015 Millenium Development Goals, 2012*, from <http://www.un.org/millennium-goals/>.
 O'FALLON, T. (2010). *The collapse of the Wilber Combs matrix: The interpenetration of state and structure stages*. Paper presented at the Integral Theory Conference, Pleasant Hill, CA.
 ——— (2012). "Development and consciousness: Growing up is waking up", *Spanda Journal* 14(III)1:....
 SENGE, P. M., SCHARMER, C. O., JAWORSKI, J., & FLOWERS, B. S. (2005). *Presence: exploring profound change in people, organizations, and society* (New York: Doubleday).
 SHELDRAKE, R. (2009). *Morphic Resonance: The Nature of Formative Causation* (Nevada City, CA: Inner Travel Books).
 SWIMME, B., & BERRY, T. (1994). *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era. A Celebration of the Unfolding of the Cosmos* (New York: Harper Collins).
 TRUNGPA, C., BAKER, J., MIPHAM, S., & CASPER, M. (2008). *Cutting Through Spiritual Materialism* (Boston, MA: Shambhala).
 WILBER, K. (2000). *Integral Psychology: Consciousness, Spirit, Psychology, Therapy* (Boston, MA: Shambhala).
 ——— (2001). *Sex, ecology, spirituality: The spirit of evolution*. (Boston, MA: Shambhala).
 ——— (2006). *Integral spirituality : a startling new role for religion in the modern and postmodern world* (1 ed.) (Boston: Integral Books).
 ——— (2012). *Excerpt A: An Integral Age at the Leading Edge*, 2012, <http://wilber.shambhala.com/html/books/kosmos/excerptA/notes-3.cfm>.



BREAKDOWN OR BREAKTHROUGH.

CULTURE, CONSCIOUSNESS, AND HUMAN DEVELOPMENT

RIANE EISLER



*Riane Eisler is an eminent social scientist, attorney, and author best known for her bestseller *The Chalice and The Blade: Our History, Our Future*, now in twenty-three foreign editions, including most European languages and Chinese, Russian, Korean, Hebrew, Japanese, and Arabic.*

*Dr Eisler is sought after to keynote conferences worldwide, and is a consultant to business and government on applications of the partnership model introduced in her work. Her books include *The Real Wealth of Nations: Creating a Caring Economics*, the award-winning *The Power of Partnership and Tomorrow's Children*, as well as *Sacred Pleasure*, a daring reexamination of sexuality and spirituality, and *Women, Men, and the Global Quality of Life*, documenting the key role of women's status in a nation's general quality of life.*

*Dr Eisler is the only woman among twenty great thinkers including Hegel, Adam Smith, Marx, and Toynbee selected for inclusion in *Macrohistory and Macrohistorians* in recognition of the lasting importance of her work as a cultural historian and evolutionary theorist. She has received many honors, including honorary PhD degrees, and is included in the award-winning book *Great Peacemakers*, as one of twenty leaders for world peace, along with Mahatma Gandhi, Mother Teresa, and Martin Luther King. Website: www.rianeeisler.com; center@partnershipway.org.*

FOR MILLENNIA, WE HUMANS HAVE IMAGINED A world of peace and caring. Sometimes we've imagined this world in an afterlife. But more and more in the last centuries we've imagined it here on Earth. Now, with global warming, nuclear weapons proliferation, terrorism, escalating poverty, and continuing human rights abuses, there's a new urgency to realizing our common wish for a sane, humane world.

A hopeful sign is that many people are becoming conscious of this urgency, recognizing that we stand at a crossroads of either breakdown or breakthrough. But fundamental change has been retarded by periodic regressions to more inequity, violence, oppression, and exploitation.

Many people still believe that human nature is innately flawed. Old religious stories about original

sin persist, and new secular ones about selfish genes, our primate nature, or millennia-old evolutionary imperatives tell us that, as much as we would like it to be otherwise, our biology dooms us to violence and inequity.

These assumptions help maintain oppressive and dysfunctional systems. They ignore that we humans have enormous capacities for consciousness and caring. They also ignore the fact that human behavior is not only driven by biological factors but by cultural factors – and that cultures can and do change.

To move forward, we must answer three basic questions: What kinds of cultures support or inhibit the expression of our human capacities for caring, consciousness, and creativity? Alternately, what kinds of cultures support our capacities for cruelty, insensitivity, and destructiveness? And what can help us create the conditions for our positive capacities to develop and flourish?

This has been the focus of my research and writing. I will discuss some of my findings and recommendations in this article.

BIOLOGY AND CULTURE

The common argument about whether biology or culture shapes human behavior ignores that human behavior – indeed, the development of the brain itself – is shaped by the interaction of biology and culture. Which genetic potentials are or are not expressed is heavily influenced by our experiences. And our experiences are in turn heavily influenced by the kinds of cultures we grow up in – as mediated by families, education, religion, politics, and economics.

Cultures vary from time to time and place to place. Indeed, even matters still often considered universals are different in different cultures.

This is illustrated by cultural differences in what are considered appropriate roles for men and women. For instance, in some parts of Africa, women are expected to carry heavy loads of fuel and water for miles. In sharp contrast, the Victorian ideal was that of a weak, helpless “femininity.” The ideal for “masculinity” also varies, ranging from the Hopi view that men should be peaceful and nonaggressive to the “macho” ideal that equates being a “real man” with violence and domination.

The cultural norms for childcare also vary enormously. They range from habitual violence and strict controls, such as the swaddling that immobilizes infants and the beatings epitomized by adages such as “spare the rod and spoil the child,” to the nonviolent, gentle, and responsive methods recommended by child development studies today.

I am starting with these two examples because, as I will develop, how a culture constructs gender and childhood are key to understanding the interaction of biology and culture. But we can't see this through the lenses of conventional cultural categories.

A NEW CONCEPTUAL FRAMEWORK FOR CULTURE

As Robert Ornstein (1990) writes in *The Psychology of Consciousness*, every society's language provides categories that mould consciousness, and these categories play a major role in how we view the world – and how we live in it. For example, as long as people believed that feudalism or monarchies were the only possibilities, no other systems could be imagined.

Categories such as democracy, capitalism, socialism, and communism expanded the scope of our thinking. But none of these or other conventional social categories describe the *totality* of a culture. Religious/secular and Eastern/Western only describe ideological and geographic differences. Right/left and liberal/conservative only describe political orientations. Industrial, pre-industrial, and post-industrial describe levels of technological development. Capitalism and communism describe different economic systems. Democratic/authoritarian describe political systems in which there are, or are not, elections.

None of them tell us what configuration of beliefs and institutions – from the family, education, and religion to politics and economics – support the expression of our capacities for caring, creativity, and consciousness, and with this, relations based on mutual respect, accountability, and caring.

Studying human societies cross-culturally and historically with this basic question in mind, I developed a new system of social classification. One distinguishing feature of this system is that it pays special attention to the *primary human relations*: the formative childhood relations and the relations between the male and female halves of humanity that are essential for human survival and development. Using a multidisciplinary approach, I saw two basic social configurations. Since there were no names to describe them, I called them the *partnership model* and the *domination model* (Eisler 1987, 1995, 2000, 2002, 2007).

THE PARTNERSHIP MODEL AND THE DOMINATION MODEL

The domination and partnership models describe the core configuration of two contrasting ways of structuring institutions, beliefs, and relations that underlie cultures that are in other respects very different.

Hitler's Germany (a technologically advanced, Western, rightist society), Stalin's USSR (a secular leftist society), Khomeini's Iran (an Eastern religious society), and Idi Amin's Uganda (a tribalist society) were some of the most brutally violent and repressive societies of the twentieth century. There are obvious differences between them. But they all share the core configuration of the *domination model*. They are all characterized by top-down rankings in the family and state or tribe maintained through physical, psychological, and economic control; the rigid ranking of the male half of humanity over the female half; and a high degree of culturally accepted abuse and violence – from child-and-wife-beating to chronic warfare.

The *partnership* model has a very different core configuration: a democratic and egalitarian structure in both the family and the state or tribe; equal partnership between women and men; and a low degree of built-in violence because it's not needed to maintain rigid rankings of domination. Cultures with this configuration can be tribal, such as the Teduray of the Philippines and the Mouso of China, agrarian such as the Minangkabau of Sumatra, or industrial and post-industrial, like Sweden, Norway and Finland. These are not ideal societies. But their beliefs and institutions support respect for human rights in families and the family of nations.

Nordic nations are democratic cultures where there aren't huge gaps between haves and have-nots and a generally high living standard for all. They encourage gender equity in families and society. They pioneered the first peace studies programs, have laws prohibiting physical punishment of children, and have a strong men's movement disentangling “masculinity” from domination and violence.

In these societies, women play important leadership roles, constituting approximately 40 percent of legislatures. As the status of women is higher, stereotypically feminine traits and activities such as nurturance, non-violence, and caregiving are considered appropriate for men as well as women. These traits and activities are supported by fiscal policies such as funding for universal health care, elder care, child care allowances, and paid parental leave. The Nordic nations are leaders in environmental protection. And these nations are regularly at the top of the UN national quality of

life charts – way ahead of nations that still orient closely to the domination model.

THE PATTERNS OF PREHISTORY AND HISTORY

The tension between the domination and the partnership model reveals hidden patterns in our past and present. This tension goes way back into prehistory, shaping the course of cultural evolution and the possibilities for our future.

Based on data indicating that human cultural organization did not follow a single linear course, as assumed by many conventional accounts, the cultural transformation theory I introduced in *The Chalice and The Blade* (Eisler, 1987) proposes that from the beginning cultures took a variety of paths – some orienting primarily to the domination model and others orienting more to the partnership model. This multilineal theory of cultural evolution (Eisler, 2004) is more congruent with a basic tenet of Darwinian and neo-Darwinian thinking: behaviour will adapt to a given environment within the limits of the organism's flexibility.

For most species, adaptation is largely unconscious. While unconscious motivations also shape human behaviours, and hence human cultures, to the extent that our behaviours are conscious and intentional, adaptation can be influenced by human creativity. Moreover, we humans are not just reactive. We can also be proactive. So for us adaptation to different environments is not the whole story. We also have the capacity for conscious choice.

Certainly environmental factors seem to be implicated in the very different cultures of our two closest primate relatives: the bonobos and the common chimpanzees. Until recent human incursions, the bonobos's forest habitat provided an abundant food supply. This more hospitable environment undoubtedly contributed to the fact that the bonobos's social organization is much more partnership-oriented than that of the chimpanzees: it is less rigidly top-down; it is not male dominated; and it has a low degree of violence.

Likewise, archeological and mythical data suggest that partnership-oriented cultures developed in the more hospitable areas of the globe where the earliest agrarian cultures emerged. These data also suggest that domination-oriented cultures developed in the more arid, inhospitable areas where nomadic herding cultures emerged (Eisler, 1987, 1995; Gimbutas, 1982; Jiayin, 1995; Mellaart, 1967; Platon, 1966).

That domination or partnership cultures are likely to arise in different environments is further supported by cross-cultural data. To investigate the origins of

male dominance, Sanday (1981) examined data from 156 societies distributed relatively equally among the six major world regions, spanning the period between 1750 BC and the late 1960s. She found that societies in more fertile areas were more likely to be sexually egalitarian, whereas societies in less hospitable environments were more likely to be male dominated. She also found that “sexually equal societies are less likely to be faced with periods of famine than sexually unequal societies” and that warfare was another source of stress found in male-dominant societies. That is, domination-oriented cultures are more likely to be found in environments where the necessities of life are hard to come by, whereas more partnership-oriented cultures are more likely to be seen where life is not so harsh.

However, none of this is to say that the natural environment is the sole determining factor for the kind of culture we live in. As particular family structures, religions, education, art, law, economics, politics, and other institutional forms develop, they together become contributing elements of the human environment. As this occurs, a whole new set of dynamics comes into play.

Once cultural patterns become established, they acquire a life of their own. Cultures, like other living systems, seek to retain their basic patterns. In looking at cultural evolution, we therefore have to take into account principles of systems self-organization that maintain particular cultural pattern (Eisler, 2004).

Nonetheless, even the most entrenched systemic patterns can be altered during periods of disequilibrium. We therefore also have to take into account principles of discontinuity when systems disequilibrium makes possible foundational change (Prigogine and Stengers, 1984; Gould, 1980).

In *The Chalice and The Blade* (Eisler, 1987) and other publications (Eisler, 1995, 2000, 2004, 2007), I detail evidence indicating that during a chaotic time in prehistory a shift from a partnership to a dominator direction in the more fertile areas of the globe radically altered the course of civilization (See, e.g., Nash, 1978; Childe, 1958; Gimbutas, 1982; Platon, 1966; Min, 1995).

I also detail evidence showing a periodic movement over recorded history toward the partnership model countered by fierce resistance and periodic regressions. And I present evidence that in our time of mounting systems disequilibrium, the momentum toward partnership has been accelerating – offering the possibility of another fundamental cultural shift: this time from domination to partnership.

If we look at the last three hundred years from this perspective, we see one organized social movement

after another challenging traditions of domination. In the 18th century, the “rights of man” movement challenged the “divinely ordained right” of kings to rule over their “subjects.” In the 19th century, the feminist movement challenged the “divinely ordained right” of men to rule over the women and children in the “castles” of their homes. In the 20th and 21st centuries, the civil rights, women’s rights, indigenous rights, peace, social and economic justice, and environmental movements continued and broadened the challenge to entrenched traditions of domination.

All these movements were driven by deep human needs and motivations for caring and equity. Yet they were also fiercely resisted. And their gains have periodically been pushed back by regressions to the domination model.

To better understand this resistance and regression, my research moved into new areas. As I will discuss next, this includes a new analysis of how the interaction of culture and biology affects the human brain.

CHANGING SOCIETY AND THE BRAIN

I am now proposing that to prevent regressions and accelerate the shift to more equitable, peaceful, and sustainable world cultures, we have to look at how the experiences characteristic of domination or partnership cultural environments interact with our brains. Specifically, I am proposing that to better understand and effectively change chronic violence, injustice, and oppression, we have to move beyond the idea that these are inevitable results of our evolutionary heritage, and look at how the differences between the partnership model and the domination model not only influence beliefs and behaviours but impact nothing less than the neurochemistry of our brains.

The human brain is remarkably flexible in youth and even in adulthood – so much so that it has been called a work in process. This flexibility allows us to learn and innovate but also has its drawbacks. If we grow up in domination cultural environments, we tend to develop a brain neurochemistry that is adaptive to these environments.

Indeed, in rigid domination settings people do not usually survive very long if they fail to obey orders from above. They will be burned at the stake, stoned to death, shot, or at best imprisoned. Under such conditions, harsh parenting styles can be said to be adaptive, as they teach children to submit to those in control. But this adaptation requires that the human capacity for empathy and caring be dampened, even suppressed, because it would interfere with these stressful styles of parenting. That is not to say parents

who do this don’t love their children, but their love becomes conflated with coercion, as is appropriate in social systems where relations are ultimately backed up by fear and force.

Scientists have found that traumatic or chronic stress is associated with high levels of the hormone cortisol and the neurotransmitter norepinephrine. Scientists have also found that these chemicals are in turn associated with problems of impulse regulation and propensity to violence. Conversely, free circulation of the neurotransmitters dopamine and serotonin, the hormones oxytocin and vasopressin, and other substances involved in bonding and empathy, is associated with the less stressful, nonviolent, caring experiences. These would be more characteristic of the partnership model (Eisler & Levine, 2002). Though there may be individual variations to any pattern, *the key point is that there are central tendencies produced by different socialization processes.*

Babies are born with a need for empathic love, validation, and stimulation. Yet to maintain a domination culture, children must be taught to conform to top-down control. Patterns of childrearing are carried over into peer groups where even children not exposed to dominator parenting are socialized for dominator relations. And if mass socialization – religious or secular – presents these kinds of relations as normal, moral, and even fun, as many films, TV, and video games do, these patterns are further reinforced.

Such socialization can get in the way of meeting our most basic emotional needs, including love and caring, and also in the way of the inherent flexibility of the human brain, and potential for innovation, and risk-taking. Montuori, Combs, and Richards (2004) identify “openness to experience” (rather than suppression or repression) and five other “core creative traits” which make awareness, questioning, and innovation more likely in an individual and, also, when possessed by groups of individuals, can further the ground-up evolution of healthy creative systems. These are: Independence of Judgment, Tolerance for Ambiguity, From Polarization to Complex Thinking, Androgyny, and Complexity of Outlook. Each of these would be vastly more at home in a *partnership* than *domination* cultural context. In fact, they could be a great threat to the stability of the latter.

DOMINATION AND PARTNERSHIP CULTURAL ENVIRONMENTS

Because the socialization required to impose and maintain relations of domination and submission is chronically stressful, people may develop neural and biochemical patterns that trigger fight-or-flight and/or

dissociation responses that aren't appropriate for the circumstances (e.g., Solomon & Siegel, 2003). When these patterns develop, they can constrict our capacity for independent thought and action, and lead to more abuse and conflict.

Economic conditions characteristic of dominator systems also contribute to chronic stress. Those on bottom are most affected, but even those on top are affected by the domination system's self-perpetuating patterns of economic scarcity due to misdistribution of resources, lack of funding for health and education, diversion of resources into weaponry, and destruction of resources through environmental despoliation, war, and other forms of violence, all of which is stressful and creates a general sense of insecurity and fear (Eisler, 2007).

Studies also show that hierarchies of domination in themselves are a source of stress. This was dramatically shown by the "Whitehall Studies" of Marmot and his colleagues (1978) of the British civil service. Results showed that physical health, mental health, and even lifespans, correlated significantly with an individual's position in the civil service hierarchy: those higher up in the hierarchy were healthier and lived longer than those further down. These people were not poor. Yet these relatively well-off civil servants suffered disproportionately from stress-related problems – problems that the Whitehall study found derived from the domination hierarchy itself. And, as the Whitehall studies show, sooner or later this stress can lead to heart attacks, diabetes, depression, alcoholism, respiratory illness, or cancer.

By contrast, people in partnership-oriented companies, where workers have more autonomy and power to make decisions, report less stress and more job satisfaction. A more caring ethos, which manifests itself in supportive employee benefits – from good health care plans and parental leave to profit sharing and time off to engage in community service. This contributes to good health and longevity, and more highly motivated workers (Eisler, 2002, 2007). The brain effects would support greater flexibility, creativity, ability to work in teams, and other capacities that make for greater productivity and satisfaction.

The socioeconomic gradient too is far less steep in partnership-oriented cultures. Even in the more partnership-oriented Nordic nations such as Sweden, Norway, and Finland there are statistical differences in health between higher and lower socioeconomic levels. But the average lifespan is 80 years. That these longer life spans are *not* due to genetics is shown by the fact that in the mid 19th century both adult and child death rates in these nations were very high. Nor are environmental conditions in these nations particularly conducive to

health. The longer Nordic life spans are the more remarkable because of these nations' location in cold northern areas where winter days have long hours of darkness, known to lead to depression, health problems, and suicide. Yet despite this, the more caring policies of these nations generated a highly competent and educated workforce and social conditions that help people live longer. Not only that, the Nordic nations of Finland, Norway, Sweden, Denmark, and Iceland regularly rank at the top not only of the UN Quality of Life Indexes but also of the World Economic Forum's Global Competitiveness ratings (Trivers, 1975; *United Nations Human Development Reports*; *World Economic Forum Global Competitiveness Rankings*).

Of course, partnership-oriented cultures are not stress-free. And even in the strictest domination cultural environments, some people maintain a countering independence and choose to relate in partnership ways. But to the extent that a significant part of the population is affected, negative patterns are perpetuated from generation to generation.

Based on what we are learning from neuroscience, we can predict that many people living in dominator environments may develop habitual neurochemical patterns of fight-or-flight or dissociation to adapt to the constant stress inherent in rigid rankings backed up by fear and force. We can also predict that most people accustomed to accept human rights violations in their day-to-day relations are not likely to create institutions where human rights are respected. Nor are they likely to build the "culture of peace" envisioned by the United Nations, where children will be safe, loved, and supported in the full development of their human potentials.

Thus dominator environments tend to keep humanity stuck at a less advanced level of evolution, driven by deficiency rather than growth and actualization needs, interfering with the full development of qualities that make us fully human including, consciousness, creativity, empathy, and love (e.g., Maslow, 1968, 1971).

USING OUR CREATIVITY TO CHANGE THE WORLD

Like a vast engine of many parts, personal and cultural change is an interactive process. As our consciousness expands and we make changes in our personal attitudes, behaviours, and relationships, we empower ourselves as well as others to work for cultural change (Eisler, 2002). If we make more room in our lives, and the lives of others, and in our immediate environments, for core creative traits such as independence of judgment, openness, tolerance for ambiguity, androgyny and valuing of complexity, it will affect all around us. If we are more conscious and aware, we can sense the

potential for “bifurcation,” for when things can go one way or the other, personally and culturally, during periods of disequilibrium (Loye, 2004; Montuori, Combs & Richards, 2004). And if we recognize the pivotal importance of empathy and caring in supporting our capacities for consciousness, creativity, and love, all this can build on itself.

The positive news is that a growing number of people today are leaving behind traditions of domination and moving toward partnership (Eisler, 2004). But social policies have lagged way behind these changes in most world regions. Indeed, countering the powerful modern grassroots movement toward partnership, the last decades of the 20th century and the first decades of the 21st have been times of regression to the domination model.

A major problem is that there are critical areas of lack of consciousness. While regressions to domination always include a return to an authoritarian, male-dominated, punitive family, sadly, many groups working for democracy and equality still view “women’s rights” and “children’s rights” as secondary, rather than an integral part of the picture.

Hence, we have lacked the solid foundations on which a better world can rest. The partnership and domination models provide important information for constructing more solid foundations. Unlike earlier social categories, this system of classification recognizes the central importance in moulding attitudes and behaviours of the primary human relations.

It is in the formative childhood relations and the relations between the male and female halves of humanity that people first learn respect for human rights or acceptance of human rights violations as normal, inevitable, even moral. These relations also teach important lessons about violence. When children experience violence, or observe violence against their mothers, they learn it’s acceptable to use force to impose one’s will on others. If children grow up in families where females serve and males are served – and, as is the case in many world regions, where females get less food and healthcare – they learn to accept economic injustice in all spheres of life. Not only that, as noted earlier, the brain’s neural pathways are largely laid *after* birth – and early experiences are key to whether neural patterns of flight-or-flight that perpetuate both intimate and international violence become habitual.

Many directions for potential change are detailed in Eisler (1995, 2004, 2007, 2012). I will end this article with two that I have initiated through the organization I direct, the Center for Partnership Studies (<http://www.partnershipway.org/>).

One lever for fundamental change is ending entrenched traditions of intimate violence – the violence against

women and children that is the most prevalent human rights violation in the world, with yearly casualties far higher than the much more publicized violence from accidents, wars, and terrorism. This is why with Nobel Peace Laureate Betty Williams I co-founded the Spiritual Alliance to Stop Intimate Violence (SAIV – www.saiv.net), an international initiative of the Center for Partnership Studies to bring a strong – tragically still missing – moral voice to end violence against women and children. This will also help free males from the prison of dominator gender stereotypes of strength, denial of feelings, and other constriction of their humanity as the price for “real masculinity.”

A second critical lever is changing the economic rules of the game to give visibility and value to the most foundational human work: the work of caring and caregiving still stereotypically considered “women’s work.” We need economic inventions that truly value this work, ranging from new measures of productivity that, unlike GDP, include the enormous economic contribution of the life-supporting activities performed in families, to economic inventions such as paid parental leave and social pensions for caregivers that give real support to this socially and economically essential work. Only as caring is given more value and visibility can we realistically expect the more caring policies so urgently needed in our world today (Eisler, 2007).

As the awareness of the inadequacies of GDP spreads, a growing number of people are working on alternative measures of economic health. However, as documented in *The State of Society: Measuring Economic Success and Human Well-Being* (de Leon and Boris, 2010) the report I commissioned through the Center for Partnership Studies from the Urban Institute, so strong is our heritage of devaluing women and anything stereotypically associated with them, that even these new indicators fail to give visibility and adequate value to the work of caring for people, starting in early childhood. Nor do they take into account studies showing that one of the most powerful predictors of both quality of life and national economic success is the status of women (Eisler, Loye, and Norgaard, 1995; Hausmann et al, 2010)

This is why the Center for Partnership Studies has launched its Caring Economy Campaign (CEC). One of its primary goals is the development and adoption of new Social Wealth indicators that provide the empirical evidence showing that the most cost-effective investment a society can make is in the care work that brain science shows is essential for full human capacity development. We are proposing the these Social Wealth indicators be incorporated in the

forthcoming Key National Indicator System for the United States as essential in identifying the drivers needed to develop the “high quality human capital” economists agree is the most important capital as we shift from a manufacturing to a knowledge/service economy worldwide. The CEC also offers an on-line Caring Economy leadership training program and is bringing together a coalition of local, national, and international organizations to inform policy makers and the public of the need for, and benefits of, a caring economy. The CEC website (www.caringeconomy.org) features blog postings, fact sheets, videos, and resources of allied organizations and individuals working to create a more caring and prosperous economy because changing how we think about and structure economic systems is a key lever for change.

Other levers for change include education for partnership rather than dominator parenting, mass media that model caring and sensitivity rather than violence and insensitivity, and curricula for schools and universities that point to the key importance in the evolution of human nature of traits, motivations, and behaviours such as empathy and caring stereotypically viewed as “soft” or feminine – whether they reside in women or men (Eisler, 2000).

We humans are the most creative life forms on our planet – amazing beings that can change not only our environments but ourselves. With a growing consciousness of who we are, who we can be, and what is needed for a more sustainable, equitable, and peaceful global culture, we can use our enormous creativity to construct foundations for truly civilized cultures. As co-creators of our future, we can build cultures in synch with the direction of evolution toward the consciousness, caring, and creativity that are the true hallmarks of being human. ☺

* Portions of this article are adapted from Riane Eisler's new book in progress.

SELECTED REFERENCES

- CHILDE, V.G. (1958). *The dawn of European civilization* (New York: Knopf).
- CLARK, M. E. (2002). *In search of human nature* (New York: Routledge).
- DAMASIO, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness* (New York: Harcourt).
- DAWKINS, R. (1976). *The selfish gene* (New York: Oxford UP).
- DE LEON, E., and E. T. BORIS. (2010). *The State of Society: Measuring Economic Success and Human Well-Being* (Washington DC: The Urban Institute).
- DEWAAL, F. (2001). *The ape and the sushi master* (New York: Basic Books).
- DOBZHANSKY, T. (1968). “Cultural evolution”, in D. L. SILLS (ed.), *International encyclopedia of the social sciences* (vol. 5, New York: Free Press).
- EISLER, R. (1987). *The chalice and the blade* (New York: Harper & Row).
- (1995). *Sacred pleasure* (San Francisco: Harper Collins).
- (2000). *Tomorrow's children: A blueprint for partnership education in the 21st century* (Boulder, CO: Westview Press).
- (2002). *The power of partnership* (Novato, CA: New World Library).
- (2004). “A multilinear theory of cultural evolution”, in D. Loye (ed.), *The great adventure: Toward a fully human theory of evolution* : 67-98 (Albany, NY: SUNY Press).
- (2007). *The real wealth of nations: Creating a caring economics* (San Francisco: Berrett-Koehler).
- & LEVINE, D. S. (2002). “Nurture, nature, and caring: We are not prisoners of our genes”, *Brain and Mind*, 3(1): 9-52.
- EISLER, R., D. LOYE, and K. NORGAARD. (1995). *Women, Men, and the Global Quality of Life* (Pacific Grove, CA: CPS)
- GIMBUTAS, M. (1982). *The goddesses and gods of old Europe* (Berkeley: University of California Press).
- GOULD, S. J. (1980). *The panda's thumb* (New York: Norton).
- HAUSMANN, R., L.D.TYSON, and S. ZAHIDI. (2010). *The Global Gender Gap Report* (The World Economic Forum).
- HO, M. (1998). “Organism and psyche in a participatory universe”, in D. Loye (ed.), *The evolutionary outrider: The impact of the human agent on evolution* (Westport, CT: Praeger Publishers).
- LOYE, D. (2000). *Darwin's lost theory* (New York: iUniverse.com).
- (ed.). (2004). *The great adventure: Toward a fully human theory of evolution* (Albany, NY: SUNY Press).
- (2004). “What should it look like: Foundations and guidelines for building the fully human theory of evolution”, in D. Loye (ed.), *The great adventure: Toward a fully human theory of evolution* : 252-268 (Albany, NY: SUNY Press).
- MASLOW, A. (1968). *Toward a psychology of being* (New York: Van Nostrand).
- (1971). *The farther reaches of human nature* (New York: Viking).
- MEANY, (2000). In G. Kahrman, “Meany: evidence that love helps brain in rats and humans”, *The Province*.
- MELLAART, J. (1967). *Çatal Hüyük* (New York: McGraw-Hill).
- MILLER, G. A., GALANTER, E., & PRIBRAM, K. H. (1986). *Plans and the structure of behavior* (New York: Adams Bannister Cox).
- MIN, J. (ed.) (1995). *The chalice and the blade in Chinese culture* (Beijing: China Social Sciences Publishing House).
- MONTUORI, A., COMBS, A., & RICHARDS, R. (2004). “Creativity, consciousness, and the direction for human

- development”, in D. Loye (ed.), *The great adventure: Toward a fully human theory of evolution* : 197-236 (Albany, NY: SUNY Press).
- NASH, J. (1978). “The Aztecs and the ideology of male dominance”, *Signs*, 4: 349-362.
- O'MANIQUE, J. (2002). *The origins of justice: The evolution of morality, human rights, and law* (Philadelphia: University of Pennsylvania Press).
- ORNSTEIN, R. (1990). *The psychology of consciousness* (New York: Penguin).
- PERRY, B. D. (2002). “Childhood experience and the expression of genetic potential: What childhood neglect tells us about nature and nurture”, *Brain and Mind*, 3(1): 79-100.
- PERRY, B. D., POLLARD, R. A., BLAKLEY, T. A., BAKER, W. L., & VIGILANTE, D. (1995). “Childhood trauma, the neurobiology of adaptation, and “use-dependent” development of the brain: How “states” become “traits””, *Infant Mental Health Journal*, 16: 271-291.
- PLATON, N. (1966). *Crete* (Geneva, Switzerland: Nagel Publishers).
- PRIGOGINE, I., & STENGERS, I. (1984). *Order out of chaos* (New York: Bantam Books).
- QUARTZ, S., & SEJNOWSKI, T. J. (1997). “The neural basis of cognitive development: A constructivist manifesto”, *Behavioral and Brain Sciences*, 20: 527-596.
- SANDAY, P. R. (1981). *Female power and male dominance: On the origins of sexual inequality* (Cambridge, England: Cambridge UP).
- SOLOMON, M. F., & SIEGEL, D. J. (2003). *Healing trauma: Attachment, mind, body, and brain* (New York: Norton).
- SCHWAB, K. (2011). *The Global Competitiveness Report 2010-2011* (The World Economic Forum).
- SPITZ, R. A. (1945). “Hospitalism: An inquiry into the genesis of psychiatric conditions in early childhood”, *Psychoanalytic Study of the Child*, 1: 53-74.
- TRIVERS, (1975). *United Nations Human Development Reports* (New York: Oxford UP).
- WORLD ECONOMIC FORUM. *The Global Competitiveness Rankings*. http://www.weforum.org/site/home_public.nsf/Content/nordic+countries+lead+the+way+in+the+world+economic+forum%e2%80%99s+2004+competitiveness+rankings.
- ZIEGLER, D. (2002). *Traumatic Experience and the Brain* (Phoenix, AZ: Acacia).



THE FUTURE OF THE HOLY: FROM SEX TO EROS

M A R C G A F N I



Marc Gafni, D.Phil., Scholar-in-Residence and Director of the Center for World Spirituality, is a philosopher and public intellectual who is leading the emergence of the World Spirituality movement based on what Gafni has termed the Democratization of Enlightenment. At the core of his teachings is what he calls the Enlightenment of Full-

ness, the linchpin of which is Unique Self Teachings, a breakthrough technology with the potential to change the source code of the human experience. The Unique Self teaching is now being adapted in leading treatment centres, universities, private schools and spiritual centres all over the world. In each of these fields serious work is being done by leaders in their respective fields to bring Gafni's teaching to bear in a way that redefines the field.

Over the past thirty years, Dr Gafni has developed many educational programs and workshops rooted in traditional wisdom and yet fully adapted to the needs of the contemporary world. His acclaimed writings and standing-room-only lectures are known for their unique mix of profound teaching and transmission, open hearted compassion and love, intellectual rigor.

He earned his doctorate from Oxford University in England and today he lives in the greater San Francisco area. He is the father of four children. Website: www.marcgafni.com.

SEX. IS THERE ANYTHING ELSE THAT SO GRABS our rapt attention, incessantly pursues us, occupies our daydreams, fantasies, and yearnings? The kabbalists state the obvious: God is trying to get our attention. Now I am not talking about the God who sends good people to burn in hell because they slipped up on one of his impossible demands. Nor even the Grandfather in heaven who hands out chocolate to do-gooders. Forget that God. The God you don't believe in doesn't exist. Rather, the God that exists for us is the personal erotic life force that courses through reality. The God we believe in is the vitality of eros. The God we believe in is the force for healing and transformation in the world. The God who knows our name¹. That is the God who so clearly calls out to us that sex *is* the answer.

When religion splits us off from our sexuality, we correctly intuit that something is deeply askew.

But sex is not a panacea. Sex is not a drug that will soothe away the lurking feeling of ennui that this cannot be all there is. Good orgasms will not a good life make. Rather, sex is the answer *as a model and not as the sum total* of eros. Sex, if we will but listen, is a great master of the spirit – better than any guru, psychologist, rabbi, or priest. Sex can teach us how to reclaim the erotic in every aspect and element of our lives.

THAT IS THE ESSENCE OF
HEBREW TANTRA,
THE KABBALISTIC SECRET
OF THE CHERUBS

The core of Hebrew tantrism was the cherubic mysteries which taught that the sexual was more than a force to be merely controlled or merely indulged. Rather, the sexual in all of its intense pleasure is the model for all spiritual wisdom. The goal of spiritual living is to become a lover and to engage all of life erotically. Sex is our most important guide, offering glimmerings of guidance that pave the way to illumination. Illumination, in Hebrew called Zohar, is achieved when one lives erotically *in every facet of being*². The cherubic mysteries – which we will unpack for the first time in two thousand years³ – teach you how. It is this tantric system that was the hidden core of the mysteries in Solomon's Temple.

The Temple in Jerusalem was the centre of the mystery cult which taught that erotic living was the core goal of the life of the spirit and that this erotic life was modelled but not exhausted by the sexual. We know that eros is very different from sex, but we also know that sexual symbolism was central in the Jerusalem Temple⁴. The most striking of these symbols were the sexually entwined cherubs perched atop the ark of the covenant in the Holy of Holies. Why should this be so if the Temple is the seat of eros, and eros we know is something very different from sex? Why wouldn't the Temple use some other image of eros? Wouldn't a statue of a runner who has become the wind or a painter engrossed in her colours be a more fitting figure to perch atop the ark? If eros and love are more than sex, then why does the Temple insist on using a blatantly sexual image?

The answer is simple yet elegant and powerful. Sex and eros are different, but essentially related. The relation is that sex models the erotic. That is to say,

within the sexual itself are the most important hints of eros. It is from the nature of the sexual that we learn what it means to live erotically.

When sex becomes virtually the only arena in which we experience erotic fulfilment, then the Shechina is in exile. The exile of the Shechina is the exile of the erotic into the sexual. The redemption of the Shechina is therefore the re-expansion of eros from the narrow confines of the sexual back into the broad expanse of living. The goal of life is to live erotically in all facets of being. There are four faces of eros hinted at in these mysteries⁵, which when taken together, form the essence of the Shechina experience. Being on the Inside, fullness of presence, yearning, and interconnectivity. These are all Shechina qualities, qualities of erotic living.

Being on the inside means not on the inside of your sexual partner, for that is limited to the masculine sexual experience; rather, it is about being on the inside of the experience itself. Yearning is of the essence of the sexual. So much so that it is often thought by poets and psychologists to be more pleasurable and intense than the fulfilment itself. Interconnectivity is nowhere more clearly manifested than in the sexual drive. We are born with an urge to merge. Finally, it is in the sexual where – in its ideal expression – we are most fully present to each other. Every gesture, fragrance, sigh, and whisper ripples through us as we listen deeply to the erotic instructions that well up from the depth of our soul's body.

All four of the primary faces of eros are modelled in the sexual; however, and this is the key, they are not exhausted by the sexual. It would be a great tragedy of the spirit if the only place where we experienced full presence, interiority, yearning and primal interconnectivity, were in the sexual. That would be to confine eros to the narrow confines of the bedroom, when it needs to soar through our kitchens, our offices, our carpools, our classrooms!

HEBREW TANTRA

Hebrew tantra is a term coined by a cluster of different people in the last thirty years. Myself, Kabbalah scholar Moshe Idel, and Hebrew scholar Raphael Pattai have all used the term independently. Each person is referring in a different way to the sexual symbolism which lies at the core of the Holy of Holies – the Secret of the Cherubs⁶.

What I mean by Hebrew tantra is ancient Hebrew wisdom rooted in the esoteric mysteries of Solomon's Temple. These teachings understood implicitly that the sexual models the erotic. They viewed the sexual act itself as a great sacred mystery reflecting all the

deepest truths of the spirit. Most of these teachings are hidden. One of the methods of concealment is the fact that the teachings are scattered across vast amounts of ancient material with no obvious way of tracing the ideas. The second method of concealment is the embedding of the mysteries in the internal symbolism of the Kabbalah, a code inaccessible to the unversed.

Yet, in all quests after the mysteries, the first source is never textual; it is rather the soul itself. In the words of Job, which take on dual meaning in this context, "Through my flesh I vision God." I was convinced from an early age that religion had lost what I believed must have been its original erotic vitality. I knew that the sexual somehow held the mystery of return to this much larger-than-sexual eros. Moreover, I was convinced that paganism stripped of its non-ethical practice had much to offer us in the renewal of the old religion for our postmodern souls.

Contrary to classical religion and much of psychology, Hebrew tantra insists that sex is integrally related to love and eros. There is no disconnect. Not because it is always nice if you love the person you are sleeping with. But far more powerfully, and this is the Secret of the Cherubs, because *the sexual is the ultimate model for eros and love*.

Thirteenth century Hebrew mystic Isaac of Acco said it most boldly, "Whoever has not desired a woman is like an ass and even less than an ass, for it is from the sexual one understands divine service⁷." Sex stands as the ultimate symbol, both signifying and actually modelling the erotic experience in all areas of life. The goal of life is to live erotically in all facets of being, and sex is the *model* par excellence for erotic living.

SEX IS THE ANSWER

Freud's understandings, which have so coloured our own unconscious view of the word, are the precise opposite of the secret of the cherubs. *For Freud everything is a metaphor for sex. For the kabbalists, sex is a metaphor for everything*. Freud was interested in reduction, in bringing everything down. He lived in an era still in rebellion against 1700 years of Church domination, crippling science, freedom and beauty. As a result, he, like most of the intelligentsia of his age, automatically rejected spirit as a serious force. So, Freud reduced everything in the world to sex.

The mystical project, however, is not about reduction; it rather seeks to raise up all the scattered sparks of light and return them to their source⁸. To the kabbalist, all the processes in the world, including sex, are erotic at their core. For the kabbalists, sex points to the erotic.

This opens an even deeper distinction between Freud and the Kabbalah. For Freud, sex was a human release valve that allowed for the release of tension and therefore assured more effective functioning. For the kabbalist, effective spiritual living was not facilitated by releasing tension, but by holding eros. A perfect world for Freud would be one in which everything was de-sexualized; then sex itself could perform its natural biological release valve function without creating neurosis and complexes. For the kabbalist, the ideal world would be one in which the sexual modelling of the erotic was made conscious with the resultant eroticizing of all of reality.

EXILED INTO THE SEXUAL

Now let's go back to our lost ark and its cherubs situated in the inner sanctum of the Temple. The ark in particular and the Temple in general are the mythic symbols of the Shechina – that is, of the erotic experience⁹. That is precisely what the mystery texts mean when they say the Shechina dwells between the cherubs atop the ark. The fall of the Temple is thus not a mere historical event. In myth, the fall of the Temple is the fall of eros. This experience is called by the kabbalistic masters *the exile of the Shechina*¹⁰.

Open your hearts and minds to hear the next sentence. The exile of the Shechina means no less than the exile of the erotic. But where did it go? To where was eros exiled? The answer is that the exile of the Shechina is *the exile of the erotic into the sexual*. That is to say, when the only place we access the core qualities of eros is in the sexual, then eros, or the Shechina, is in exile¹¹. When the only time I feel like I am on the inside is in great sex, then the Shechina is in exile. When intense desire is a feeling I touch only before exploding in orgasm, then my life is poor indeed. The Shechina is exiled. Eros has fallen.

However, we cannot live in a non-erotic world. So, unconsciously we seek compensation. We look to get our erotic fix in the sexual. But this doesn't work either. For when you de-eroticize the entire world except sex, then the sexual collapses as well. You see, we all have erotic needs. These needs require attention in all of life, but if we ignore them in all of life, then we demand that the sexual fill all of our erotic needs. And so sexuality shrugs, collapsing under the weight of an impossible demand.

EXILE WITHIN AN EXILE

In the language of the kabbalists, we are now in an exile within an exile¹². The first exile of the

Shechina is the exile of the erotic *into* the sexual. The second is the exile of the erotic *within* the sexual itself. The erotic is exiled to a very limited domain within the sexual: transgressive or illicit sexuality *which breaks your own boundaries*.

We have gotten to the point where we cannot even find the erotic in most of the arenas of the sexual. In order to touch that intense desire which brings us to a place deep in the infinity of the moment – on the inside of the inside – many people need a sexuality which breaks the boundaries of their own authentic story. We either downgrade or upgrade sex. The result of the first is adultery, degrading forms of pornography, and all varieties of sexual abuse. The second expresses itself in the search for sex in the form of the ideal true love. It is, of course, so ideal that is inaccessible, leaving us forever fantasizing about the perfect lover or reading endless varieties of the same sexy romance novel. *We are desperately searching for eros in all the wrong places*.

The yearning for a rebuilt Temple is not an artist or carpenter's fantasy. It is rather the dream of a world in which raw eros, today exiled to illicit sexuality, will be accessed in the context of committed relationships. The goal is to move beyond the need for stolen waters. To be able to access the full power and passion of the sensual within the context of your own highest story, where your own waters are satisfying and sweet¹³.

HARLOTS AND PRETENDING

One of most famous images of the Shechina in exile laced throughout the Zohar is the prostitute¹⁴. The problem with prostitution is not primarily an ethical problem. Ethical prostitutes can have far more moral decency than the ostensible pillars of the community. Images of the wise and good harlots abound in literature. From Rahab the harlot who marries Joshua in the Bible, to Mary Magdalene, to the Best Little Whorehouse in Texas.

The problem with prostitution is the depersonalizing of sex. Eros is about the inside and face. The prostitute is faceless and nameless. Emotionally, the client is always on the outside. There is no intimacy. Ultimately, this erotic failure becomes an ethical failure. The person goes to the prostitute because he is lonely. He is eros starved and not sex starved, knowing the only place he can get an erotic fix is in sex. The Shechina, the erotic, is exiled in the sexual. All too often – through no fault of the prostitute – he feels emptier after sex than he did before. He will usually ejaculate, but he will rarely achieve fulfilment.

The highest paid courtesan, of course, is the one who heals the split between sex and eros; for at least that evening, she is not only sexual available, but also fully engaged, present, and loving. Generally, however, the eros is not real, as it is simply impossible to be truly available and present to so many people, day after day. So, the best-case scenario is an unspoken agreement. She will pretend, and he will pretend, and the pretence will be sufficient for that is all there is. Sex and eros are split. The Shechina is in exile.

THE TANTRIC PILGRIMS

Three times a year, pilgrims would gather in Jerusalem from all over the land of Israel. These gatherings were called the Holidays of Vision (*Chag HaReiya*). One can well imagine that on these holidays the adept among the pilgrims practiced visualizations, chanting, meditations, and a host of other spiritual techniques. These mysteries were passed from the Temple initiates in Jerusalem to the Greco-Egyptian community of Alexandria. They were disseminated by Solomon to all of the surrounding cultures. Indeed, two great nineteenth century mystical masters, Mordechai Lainer of Ishbitz and his teacher Simchan Bunim of Pshischa, already hint at a systematic program of spiritual teaching partially rooted in Goddess mysteries, initiated by Solomon and his wives¹⁵. Just so that we make clear what we are saying here, Mircea Eliade already notes that there are profound parallels between Indian yogic tantra of both the Hindu and Buddhist variety and Western mystery traditions from Hermetic, Gnostic, Early Christian, and Greco-Alexandrian sources. What Eliade fails to note is that these traditions had their probable source to a greater or lesser degree in the mystery cults of Solomon's Temple. The mystery of the cherubs are, then, not a Hebrew version of Indian tantra. Quite the opposite – they are the likely *source* of the Indian yogic traditions as well as much of the great Western mystery tradition.

So our return to Hebrew tantra is a return to a fountain from which all these great wisdoms sprang¹⁶. There are, however, two enormous differences between Hebrew and Hindu tantra in their classical sources. In much of Hindu tantra, it is the avoidance of sexual release which allows the adept to re-channel the sexual energy inward and upward instead of outward. In Hebrew tantra, it is the natural flow of sexual expression, including release, which models the lover's path in all arenas of living.

Second, in Hindu tantra, the sense of the sources is that the partner is almost a sacred object. She is a

symbol of the feminine principle, but in her being the symbol, she is fully depersonalized – a kind of nameless yogini who is a necessary aid in the spiritual tantric journey of the male adept.

In Hebrew tantra, the partner is both a Shechina incarnation and fully personalized at the same time¹⁷. The sexual, existential fulfilment and pleasure of one's partner is the primary ethical and erotic obligation of the Hebrew adept. The spiritual tantric journey is only sacred within that highly personalized intimate context.

Moreover, in the Hebrew tantric path, the partners must share a committed relationship beyond the sexual. Naturally then, there is no danger of splitting sex from eros in all facets of life. In the Hindu tantric model, there was no committed relationship between the man and woman. For the Hebrew mystic, this all is the exile of the Shechina. Classic Hindu tantra (not its Western offshoots) limited eros to the realm of spiritualized sex, effectively divorcing it from all other facets of living. Sex became a limited spiritual activity which did not spill over into day-to-day partnership and commitment of the rest of life.

COSMIC LOVE AFFAIR

A young man walks in on Master Baruch and his wife in the midst of a heated argument. Startled, he quickly turns away. Baruch responds with a wink, "You don't understand. You have just witnessed a discussion between God and the Shechina."

To really touch at what the ancient mystics meant when they so deeply linked the sexual, the erotic, and the sacred, we need to go one final step further. We mentioned earlier that the Holy of Holies is understood as the marriage bed, while the ark and its tablets alternately represent the male and female sexual organs. Well, whose marriage bed is it anyways? And to whom does all this sexual anatomy belong? To human beings or God, whatever that might mean?

The texts intentionally blur the lines on this issue, for the point is that human beings and God actually share the same bed. That is to say, the Cherubs are the symbol of the great marriage between the divine masculine and divine feminine¹⁷. Between Shakti and Shiva in Hindu myth, between Kudshah Brik Hu and Shechina in the kabbalistic storehouse of symbolism. Kudsha Brik Hu is the masculine divine energy, and Shechina the feminine divine energy. When the Shechina dwells "between the cherubs," the divine masculine and feminine meet in erotic union.

But here is the major new teaching of the mystics. That union is not only modelled by – but actually initiated by – the human sexual merging.

When the relationship is real, when there is commitment and mutuality and love, then human sexual union not only models the erotic in all facets of life, it participates and affects union in the universe. It becomes an agent for healing and oneness even and especially, within God. It is in this regard that the great lover and mystic Akiva says that when man and woman join in sacred union, then “the Shechina dwells between them”¹⁸.

This, of course, is precisely the same phrase the biblical myth text uses to describe the Shechina which “dwells between the cherubs.” Between the cherubs and between the human lovers is the same place! For the mystics, then, those cherubs symbolize the masculine and feminine, both in the human and in the divine realm. Simply put, at the apex of sexuality, humankind touches, participates in, and heals divinity. This is the potential for world healing implicit in the sexual, which models the erotic and the holy.

AKIVA – MYSTIC AND LOVER¹⁹

In the kabbalistic tradition, Akiva is the penultimate lover²⁰. He is a poor shepherd who lived and walked in Israel only a few years after the death of Jesus. He witnessed the destruction of the Temple and understood deeply that the Temple was the axis of eros, and that eros is the essential force of attraction – the clasp upon the beaded necklace that holds the whole world together.

Akiva, however, initially learns of eros not from books or old wise masters. His life journey begins as a simple shepherd who passes his time in the fields, playing his flute for his God and his sheep. He is beheld late one afternoon by Rachel, the beautiful daughter of Kalba Savua, patriarch of Jerusalem’s wealthiest aristocratic family. She sees him and she *knows*. Great love and passion is kindled. They marry against the fierce objections of her family. For marrying a simpleton she is disowned. But with love and eros as their spiritual masters, Akiva makes his way to the academy and emerges twelve years later as the greatest spiritual master the Hebrew tradition has ever known.

To all his disciples, he makes clear: My true teacher is Rachel. Not just because, as is usually understood, she urges him to study for many years away from home in the academy, but because the love and eros they had between them were the greatest teachers of the spirit he ever had. Indeed, the kabbalists understand Rachel to refer both to

the real woman who loved Akiva and to a metaphor for the Goddess, for the Shechina. So when the Temple falls, Akiva needs to make people understand that for all of its magnificence and even holiness, in the end, it is but a symbol of something more: It is the symbol of eros.

A TEACHING FROM AKIVA: THE FIRE BETWEEN THEM

To that end, Akiva teaches the people two great teachings which are really one. First, he points to the Hebrew words for man and woman – I-Y-SH (א״ש) and I-SH-A (אשׁה). They are made up of two sets of letters. The first set of common letters – I-SH – appears in both man and woman. These two letters together, comprised of the Hebrew aleph (I) (א) and shin (SH) (ש) letters, form the word Eish, fire (אשׁ). Fire represents sex and passion. The Y (י) and A (א), which appear respectively in the Hebrew man and woman words, are in Hebrew *Yud* and *Hei* – יה . These are the letters of the name of God.

א״ש = man

אשׁה = woman

אשׁ = fire

יה = Yah, the name of God

When man and woman come together in sacred union, God is a third partner in their intercourse. They participate not only in the potential creation of new life below in the visible world, but also create new life above, in the divine²¹. They not only fulfil themselves in eros, but they fulfil God. “The Shechina dwells between them.” Akiva is suggesting no less than that the Shechina which dwells between the cherubs in the Temple, now dwells between man and woman in sexual union. Sexual Union in the kabbalistic tradition is the great mystical act that heals all the worlds above and below. The Zohar in a typical passage writes:

They should prepare themselves to be of one desire and one intent so that when they join they become one in body and soul; they become one in soul by aligning their wills in cleaving; when they unite in sexual union they become one in body and soul [...] It is then that God dwells between them in unified oneness.

Eros, we now begin to understand, is the primal desire from which the word springs into being. God’s eros created the world. Our lack of eros could destroy the world. Love or Die. The mystics of every religion – those who lived on the inside – understand that this is not mere metaphor. Every act of union causes and participates in divine union. The human being participates in the divine love affair, even as God participates in the human love affair. For beneath the veil of illusion, all really is one²¹!

SONG OF SONGS, HOLY OF
HOLIES

Akiva had a second teaching which takes us one step farther on the path of eros and love. Akiva participated in a great debate with the other sages over whether to include the Song of Songs in the biblical canon of sacred books. It is written as a dialogue between two lovers. “Let him kiss me with the kisses of his mouth [...] His fruit is sweet to my mouth [...] His thrust is upon me in love” The man responds, “Your lips are like the thread of scarlet [...] Your breasts are like two roes [...] Your closed garden, your secret fountain [...]”

The Song of Songs appears to be a sexual love song, perhaps to be sung in ancient taverns and beer halls. What place could it have in the sacred writ? To this argument of the sages, Akiva has a two-fold response. First, he says, know that all of the Song of Songs is a *mashal*, an allegory. Second, know that while all the books are holy, the Song of Songs is the Holy of Holies.

One way to read the text, and a way that it is usually read, is that Akiva is saying two distinct things. First, he says do not be afraid of the content of this book; it is not about sexuality. The sexual is but an allegory for the spiritual love between the human being and God. Second, know that this great spiritual love is central to the religious endeavour. This book, therefore, is not only holy, but the Holy of Holies.

That reading is but the cloak which allows Akiva to hide his truly radical esoteric doctrine. This doctrine is no less than the Secret of the Cherubs – the spring of enlightenment from which we have been sipping this entire chapter. When Akiva says that the Song of Songs is a *mashal*, he means not an allegory but a model. That is to say, the sexual story of the lovers in the Song of Songs is a model for the erotic. The erotic is identical with the sacred itself. This is Akiva’s intent when he cries out with such passion and pathos that “the Song of Songs is the Holy of Holies!” This is not a casual metaphor affirming the importance of the book. It rather contains Akiva’s deepest mystical intention. The Holy of Holies in the Temple destroyed just a few years earlier was, for Akiva and the people, the personification of eros. The cherubs reminded the people that the sexual was the window to the sacred. The secret of the sexually intertwined cherubs atop the ark was not that sex *is* the erotic and the holy, but that sex *models* the erotic and the holy.

The power of this idea does not fall with the destruction of the Temple. The fall of the Temple, insists Akiva, must not be the fall of eros. For every moment that engages life erotically, the Temple is rebuilt. Moreover, Akiva reminds a people who have just been disempowered politically that in

the end political power structures are but illusion. The human being is powerful because he/she – by living erotically – participates and creates the divine union because human consciousness and action are the touchstone.

EROS EXPANDED

Erotic fulfilment is reached when I have expanded the realm of eros beyond the sexual to embrace all of my existence. Indeed, the root of the Sanskrit word *tantra* – *tan* – means expansion. True tantric energy expands into all realms of life. This expansion is the goal of kabbalistic tantra.

The Zohar weaves this esoteric teaching into a seemingly innocent passage. The original quote is so striking that I decided to leave it virtually intact. Read it slowly, almost as a tantric meditation.

“Every person must find himself in Sexual Union (of male and female) [...] for in that way the Shechina never parts from him. And if you will say, one who travels (and is separated from his partner and therefore separated from sexual union) does not the Shechina depart from him? Come and see – before a person begins his journey, he should organize his prayer – from a place where he is in sexual union – in order to draw the Shechina down on him before he sets out on his path [...] Once he has learned the order of prayer – and the Shechina dwells on him through his sexual union, he should set out on his way – for the Shechina can now remain with him [...] in the city or in the field [...].”

“As long as he is on the way, he needs to be mindful of his path in order that the higher union, the Shechina not part from him. Even when he is not in sexual union [...] this higher union does not leave. When he arrives home he should rejoice (be sexual) with his partner [...] for she is the one through whom he accessed the higher union with the Shechina²².”

This passage, part of the cherub mystery tradition, makes the merging with the Shechina *dependent* on sexual union. Clearly, then, they are not the same thing. The goal is “higher union with the Shechina.” The higher union takes place when one has been able to move beyond the bedroom to transpose the sexual to his/her broader world. To greet the divine at every doorstep, every crossroad, in every sparrow along the way. After returning from the way, he is instructed to again be sexual with his partner in order to re-cast his life once more in the model of the sexual. In this way, sex leads him to Shechina.

It is in the move through the sexual to the erotic that we achieve the ultimate goal of the spirit: higher union with the Shechina, erotic fulfilment in every arena of living. ☉

¹ “He counts the number of the stars, and calls them all by name” (Psalms 147) – So, too, when Israel went down to Egypt, He counted them. And since they were compared to stars, he called all their names, as it says, “And these are the names of the children of Israel” (Exodus 1:1) (*Midrash Rabba* Exodus, 1:3). “And how do we know that below, too, He calls them by name? As it says, ‘See, God has called by name, Betzalel the son of Uri the son of Hur of the tribe of Judah’ (Exodus 21:2, 35:30) (*Midrash Rabba* Exodus 48:1). The source for man being called by his name is none other than Betzalel, the architect of the Sanctuary.

² The Baal Shem Tov taught: “There is nothing large or small that is separate from Him, for He is to be found in all possible realities. The complete human being is therefore able to effect higher unities (*yihudim*) even in his physical reality, whether that be food, drink, sex, business, or mundane conversations with his friends [...] This is what is meant by the biblical verse “Know Him in all your ways” (Proverbs chapter 3) as is written, “And the man *knew* Eve his wife” (Genesis 4:1) – [the word *knew*] means union and erotic coupling (*zivvug*) (*Baal Shem Tov al Hatorah*, quoted from *Toldot Yaakov Yitzhak, Bereshit* 189).

One of the greatest practitioners and adherents of this teaching was Rabbi Yitzhak Yehuda Yehiel Safrin of Komarno. He repeats this over and over again in his somewhat inaccessible writings. Quoting the Maggid of Mezeretch, he says: “Concerning this, our holy master, the pure light, our teacher Dov Ber, said that this is the meaning of what is called in the Zohar “she wears *kisbutin delo havu* – jewelry that never was” (Zohar vol. 2 95a). The *mitzvot* are called “jewelry that was,” but when a person unifies the things of this world and thus adorns the Shechina, this is called “jewelry that never was” [...] for even in the lowest level there is (erotic) unity and embracing” (*Ketem Ofir* on the first verse of Esther).

³ See especially the book *Mystery of Love* (2003) and *The Erotic and the Holy* (2006) audio series.

⁴ Not only in the case of the cherubs was there sexual symbolism in the Temple. The poles of the ark were said to have protruded from behind the veil that concealed the Holy of Holies into the sanctuary. The Talmud says that they looked like the two nipples of a woman’s breasts to someone who saw them from the Sanctuary (tractate Yoma 54a).

⁵ See Chapter 2 of *Mystery of Love* (2003) or “Interiors, Face, and Reconstruction of Eros” in essay form at www.mar-cgafni.com.

⁶ The first hint at another more profound if esoteric reading of the sources alluding however vaguely to sexuality as an erotic model came when I was 22 and studying a text of Tzadok the priest cited in a work by Gedalia Schor, which enigmatically alluded to the secret of the cherubs and cited the key talmudic texts. Eliyahu Dessler in his *Michtav MeEliyahu* makes scattered veiled references in the same direction. In the academic world, Raphael Pattai’s 1947 book on the Temple also contained important hints. Also helpful was an excellent short monograph of Saul Liberman’s on the esoteric mystery of the Song of Songs to which I was referred by Daniel Abrams. Similarly helpful was Pattai’s later work *Hebrew Goddesses* as well as the work that Pattai was greatly influenced by, *The White Goddess* by Robert Graves. Two other monographs (Ohad Ezrahi’s “Shnei Keruvim” Heb.

1997 and Moshe Eisen’s “Ye Shall be as Gods, Conceptions of the Yetzer Hara,” 1992) cite some of the scholarship on the Cherubs (Ezrahi) and give extensive primary sources material (Eisen). The same is true of a number of articles by Moshe Idel, most important among them being his article “Sexual Praxis in Kabbalah.” The limitation of all the important work cited here is that while they note that there is a mystery and that it is connected to sex, eros, and the temple, they do not examine the nature of eros and generally do not distinguish between it and sexual vitality. Similarly, they do not suggest sex as a model for eros, nor do they unpack specific paths of eros.

⁷ Rabbi Isaac of Acco is quoted by R. Elijah De Vidah at the end of *Shar Dalet of Shaar HaAhava* in his master work *Reishit Hohmah*.

⁸ In Luriannic myth, these are the 288 sparks of light that remained in the shattered vessels of the Kings after they died and are waiting for redemption. The sparks are numbered 288, based on a reading of the biblical verse in Genesis 1:2: “And the spirit of God hovered (*merahfet*) over the water.” The Hebrew word *merahfet* is broken down into *rafah met* – i.e. the “dead 288.” These sparks are redeemed by means of the “arousal of the feminine waters” (this is the water from the biblical verse) that “cause anew a Higher Coupling, and through the light that is created as a result of that *zivvug*, these Kings will be fixed” (*Sha’ar Habaqdamot, drush Ka’asher Ala, Etz Hayim, Sha’ar Hatiggun*, chapter one). This process, according to R. Isaac Luria, is the secret meaning of the “revival of the dead” (*Etz Hayim Sha’ar Rafah*, chapter one). Although this process is “built-in” as part of the Luriannic *Tiggun* stage of development, as a result of the Sin of Adam, which caused creation to fall to a level lower than what was originally intended. It has become the work of the *tzadiq* to raise these sparks up. The degree of his success is dependant on the magnitude of the mitzvah he performs or the intensity of the prayer he prays (*Etz Hayim, Sha’ar M’N uMD*, eleventh discourse, seventh principle). The Baal Shem Tov and the Hasidic movement in general placed greater emphasis on the fact that one raises up the sparks in all forms of encounter with the material world. *Baal Shem Tov al Hatorah, Ki Tisa* 29, where the Baal Shem Tov is quoted explicitly on the subject of the 288 sparks.

⁹ In the Zohar, note is taken of the fact that the biblical verse in Joshua 3:11 refers to the “ark of the covenant, the Master of the all the earth.” The verse is commonly read as meaning “the ark of the covenant of the Master of all the earth.” However, as the Zohar notes, the word “of” is missing, implying that in a sense, the ark is the Master. The Zohar therefore derives that when the Torah speaks of the ark, it is referring to the Shechina, Whose divine name is *Adonai* (master). It is called the ark of the covenant, *brit* – the *sfira* of *yesod*, since this life-bestowing *sfira* fills it with prolific abundance. The erotic imagery is clear. As such, it is an animate source of life, as it says in the *Tosefta* that appears in Zohar vol. 2, p. 13a: “In it [in the ark], one holy source is hidden, which is constantly flowing into it, and filling it. It (the source) is called the God of Hosts, blessed be He forever and in all worlds.” See also *Midrash Han’elam Eiha*: 92c, where it is written: “[...] From the ark of the Torah, food would go out to all the world, and light and blessings for all.”

¹⁰ The original idea of the exile of the Shechina emerges when the people are exiled from Israel to Babylon. In its original formulation, it indicates that the divine presence moved with the people wherever they were exiled (see for example *Midrash Rabba* on Lamentations Chapter 34). The home, the study hall, and the

communal worship center all became places where the Shechina – eros – dwelled. At the same time, the exile of the Shechina indicates a fallen state. The Shechina is not in its natural home. The people are not in their place – in their story.

This is both a geographic and existential reality – the former and the latter emphasized in different ways in various strains of rabbinic and kabbalistic thought.

I am, of course, not claiming that this reading exhausts the idea of exile of the Shechina; I am rather – in the tradition of all creative thought – weaving together a number of different kabbalistic strains of thought into the fabric of a larger vision.

¹¹ The idea that the exile of the Shechina is the exile of the erotic into the sexual is possibly best expressed in the *Raya Mehimna* and *Tiqunei Zohar* literature. Based on the biblical verse “and a maidservant that inherits her mistress” (Proverbs 30:23), the Shechina in exile is said to be the state in which the maidservant has inherited her place. The “maidservant” includes a range of possibilities (see *Raya Mehimna*, Zohar vol. 2 117b, where it says explicitly that “not all Shechinas are the same”), from the lack of fullness that resulted from Moses’ passing and the ensuing leadership of Joshua (*Tiqunei Zohar* 14b), to the most commonly defined “maidservant” state – that of the “evil one” (often identified with Lilith) – who invariably takes the Shechina’s place because of some sort of sexual sin (e.g. *Raya Mehimna*, Zohar vol. 3, 226a, *Tiqunei Zohar* 24b). She is called menstrually unclean, heathen, and a prostitute – all expressions of what we have called “fallen sex.” When she is not in union with her true lover, when all of her fullness is not being loved – when eros is exiled into the sexual – she is replaced by/becomes “maidservant” (this may have implications for feminism) (see *Tiqunei Zohar* 132b, and *Raya Mehimna* Zohar vol. 3, 222a). In some sources, it is only her clothes that have become “blackened” (*Raya Mehimna* Zohar vol. 3 279b). Although Shechina and maidservant are two expressions of the one Feminine, sometimes She is depicted as hiding herself in Metatron, so as to be protected from the evil maidservant, and she is then called Mitatron (Metatron with a *yod*) (*Tiqunei Zohar* 15a) – a description with immense theological-psychological implications. In passing, we should also mention a wildly radical twist that this kabbalistic school adds to this teaching – the fact that the maidservant is *mishna* (secondary) to the Shechina. For the author(s) of *Raya Mehimna* and *Tiqunei Zohar*, the maidservant-*mishna* represents the bothersome, dialectical, Tree of Consciousness of Good and Evil, *pipul* tradition of the Oral Torah, as opposed to Shechina as Kabbalah, the place of true intimacy, the Tree of Life, the secrets of the Torah. Although this is not the context to present and analyze this idea in all its fullness, the curious may want to look at *Tiqunei Zohar* 22b, 27b, 43b, and 147a, for starters.

¹² See above, note 11, where we showed how the Shechina in Exile is Herself in an additional exile, that of the “maidservant.” I would only add here that the *Tiqunei Zohar* presents another unusual idea – that *Kudsha Brih Hu*, the Divine masculine Himself, when He is not unified with Shechina – i.e. during the time of exile – is “exiled within the exile” into Metatron (who, in *Heihalot* texts, is referred to as *YHVH Haqatan*). To quote: “And when He is below, in Metatron, without His Shechina, He changes. This led Elisha-Aher to say, ‘Could there be two Powers?’ This is why it says “Do not replace Me with Him” (comment in tractate Sanhedrin 38b on Exodus 23:21), for My name is within

Him. For Metatron is second (*shani*) to the King” (*Tiqunei Zohar* 15a). During the time of Exile, the Shechina Who is the mistress/lover of Metatron may be helpful, if Israel merits. But if they do not, then she becomes evil desire, unclean menstrual blood. Exile within exile (*Zohar* vol. 1, 27b). This section of the Zohar is actually not part of the Zohar (from 22a-29a). Its content (including this piece) is characteristic of the *Tiqunim-Raya Mehimna* style).

¹³ “Drink the water of your own cistern, and running water of your own well. So will your spring be prolific outside, and streams of water will flow in the streets. They will be yours alone, and strangers will have no place in your intimacy. Your source will be blessed, and rejoice in the wife of your youth” (Proverbs 5:15-18).

¹⁴ Of course in a literal reading of the Zoharic literature the Shechina and the harlot are separate figures. A deeper reading, however, collapses them into one complex personae. See, for, example, *Tiqunei Zohar* 24b: “The maidservant enters the place of her mistress. She is unclean, a servant, a heathen, a harlot, and she defiles the place where the Shechina would rest.” See also above, notes 11 and 12.

¹⁵ R. Simha Bunim of Pshischa in *Kol Simba*, quoted in *Kol Mevuser* on I Kings 11:6: “King Solomon desired to heal evil, that is, that evil be integrated in good. This is why he married foreign women – in order to rectify them and to introduce everything into holiness, just as it will be in the future, at the time of the Messiah. Since it was not yet the time of the Great Fixing, Solomon was incapable of completing this work. R. Mordechai Lainer, *Mei Shiloah*, on I Kings 11:1: “For all the strength of the nations of the world can be found in their women, especially in their princesses. For this reason, he married princesses, in order to subjugate their energies to the sacred.” These are not isolated passages, but part of a broader strain of thought that runs through Pshischa and Ishbitz. I expand significantly on this strain of thought in my doctoral thesis. This school picks up on earlier strains in exoteric and esoteric Hebrew literature, which read Solomon’s wives as part of a broader proto-feminist mystical project initiated by Solomon and opposed by the prophets. In this reading, the prophetic opposition is tactical, not essential; they argue that Solomon was before his time. There were not yet vessels to hold the full erotic power of Shechina consciousness.

This reading is in response to modern writers who accuse the prophets of slaying the goddess. I significantly expand on this topic in *Radical Kabbalah: The Enlightenment Teaching of Unique Self, Non-Dual Humanism and the Wisdom of Solomon – The Great Teaching of Ethics and Eros from Mordechai Lainer of Izbica* (Integral Publishers, 2012).

¹⁶ It is beyond the scope of this work to fully document the historical path of Hebrew tantra. Suffice it to say that on a scholarly level Eliade already provides the Alexandrian link between Indian tantra and the Western mysteries which took root roughly contemporaneously to the end of the Second Temple period. The links between the Israelite community and their Alexandrian bothers and sisters are well known, documented in Philo, the Talmud, and numerous other sources. Alexandria is the center of the western mystery traditions, which Eliade links with Indian Tantrism. It requires no great leap to infer an internal esoteric Temple tradition linking the first and second Temples. Indeed, it would make no sense if there were not such a tradition. The Talmud clearly assumes such a tradition. So the link between Solomon and the Alexandrian communities of the second Temple, which were a hub of the spiritual mystery traditions that Eliade sees as possible sources for Indian Tantrism, is

then clearly apparent. I should add that although all of this is true, it is not the source of my surmise. My intuition about the relationship between the traditions comes from a deep place of knowing which is supported by research but moves beyond the important but narrow reach of scholarship.

¹⁷ The *Baal Haleshem* says explicitly that the cherubs are *Ze'ir Anpin* and *Nukva* (*Sha'arei Haleshem*, section 1:17; section 2:2). He cites *Raya Mehimna* (Zohar vol. 3, 255b), where a beautiful analogy is made between sitting in the *sukkah* (literally – protection) and being under the protective wingspread of the two cherubs., who are respectively YHVH (*ziferet*, the divine masculine) and ADNY (*malhut*, the divine feminine). When these two are in perfect erotic union, we intermingle the letters of their name, creating a new name – YAHDVNHY. The numerical value (*gematria*) of these two names together, that is, of this ideal *zivvug*, is 91 – the *gematria* of *sukkah*!

¹⁸ Tractate Sotah, 17a.

¹⁹ Tractate Nedarim, 50a.

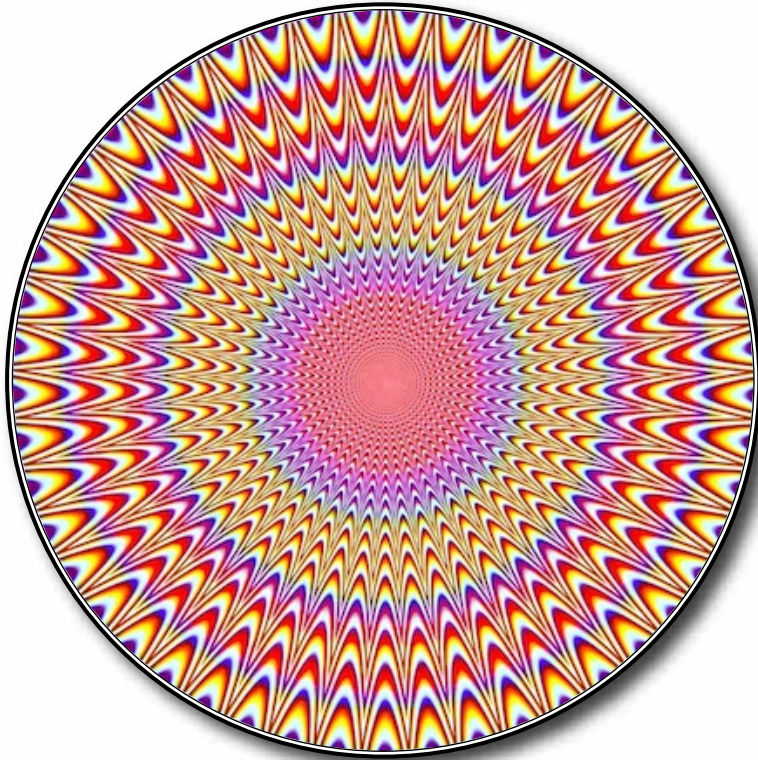
²⁰ It is not within the scope of the present essay to discuss the kabbalistic, particularly the Luriannic, traditions concerning the soul of Rabbi Akiva, which took on entirely mythic proportions. It is certainly deserving of a work of its own. I would like, however, to mention only in passing, a couple aspects of these traditions that bear directly on our discussion. The fact that Akiva was considered to be a *ben gerim*, i.e. a descendent of converts, was seen as a sign that since his soul had roots deep in the *qlippot*, he was capable of elevating them. In addition, his name contains the letters *áqv'*, creating the word *egev*, heel, which is reminiscent of *'iquata demeshiha*, the heels of the Messiah, which refers to the lowest, but concluding, therefore the most critical, soul-elements. In fact, in *Sha'ar Ma'amarei Rashbi* (on *Zohar Shir Hashirim*), this extraordinary quality of his soul is linked to Solomon, the fullness of the moon, the Temple, *bina*, and Yom Kippur. He is therefore a principle propagator of the fullness of eros. Add to this the even more bizarre tradition that he was a reincarnation of Zimri, *who had intercourse with Kozbi at the door of the Sanctuary!* (see *Gilgilei Neshamot* of R. Menahem Azarya of Fano, the letter *kaf* for Kozbi). What image could be more appropriate for our discussion?

But this goes even deeper. Akiva is one of the Ten Martyrs, who were murdered by the Romans because of their refusal to abandon their religion. In the Luriannic corpus, they died so as to rectify the sin of Joseph's ten brothers, who sold him into slavery. (In the Ten Martyrs myth, this is the rationale of the Roman governor for putting them to death, as the Torah says that if a man kidnaps a man and sells him, he must be put to death (Exodus 21:16). However, it is more profound and even disturbing than that. The role of the "Ten Martyrs" in Luriannic myth was to restore erotic union that was violated – either because the Shechina took part in the selling of Joseph, or for the sake of sparks who were so deeply embedded in the *qlipot* that they could not be redeemed. The souls of the ten martyrs became *mayim nukvin* for the cosmic *zivvug* that is accomplished through the *kavanot* of the Shma – that is, feminine waters to awaken the erotic cosmic union. This is the Luriannic interpretation of "his (R. Akiva's) soul went out as he said *ehad*" (*Berahot* 61b) – One, the last word of the Shma. For by his martyr's lover's death, he restored erotic oneness. This is one of the teachings we have from R. Isaac Luria himself. (see *Sha'ar Hagilgulim* from Chapter 35 on, *Liquetei Hashas* on tractate *Berahot* (one of the places where R. Isaac Luria himself is quoted), *Sha'ar Ma'amarei Rashbi* on *Zohar Shir Hashirim*, etc.).

²¹ In the kabbalistic tradition, sacred union creates "new souls" "Rav Metivta said: 'And Sara was barren, she had no children' – 'If it says that Sarai is barren, then I know that she did not have children. Why must the verse say 'she had no children?' But Rav Metivta said: She did not give birth to children, but she gave birth to souls. By the clinging of the passion of those two righteous ones [Abraham and Sarah], they gave birth to the souls of converts the entire time that they were in Haran, just as the righteous do in the Garden of Eden" (Zohar vol. 3, 168a). This became a major goal of the *tzaddikim* in Luriannic teachings, connected with the Zoharic tradition of the "light that was sown for/by the *tzaddik*" (Zohar vol. 2, 165b, and *Sha'ar Ma'amarei Rashbi*, the commentary on *Idra Rabba*, *Sha'ar Ma'amarei Razal al Baba Kama*, and *Sha'ar Hagilgulim*, introduction: 15). The fact that *tzaddik* is identified with the *sfera* of *yesod* (*tzaddiq yesod olam* – Proverbs 10:25) makes him the perfect candidate for this task.

²² Zohar vol. 1, 49b.





THE EVOLUTION OF ENLIGHTENMENT

ANDREW COHEN



Andrew Cohen is an internationally respected spiritual teacher, founder of the global non-profit EnlightenNext, and the author of the bestselling book Evolutionary Enlightenment. His original teaching of Evolutionary Enlightenment redefines spiritual awakening within the context of cosmic evolution and highlights a new understanding of God or Spirit as the creative impulse toward change in both self and culture. Website: www.andrewcohen.org.

Andrew Cohen is an internationally respected spiritual teacher, founder of the global non-profit EnlightenNext, and the author of the bestselling book Evolutionary Enlightenment. His original teaching of Evolutionary Enlightenment redefines spiritual awakening within the context of cosmic evolution and highlights a new understanding of God or Spirit as the creative impulse toward change in both self and culture. Website: www.andrewcohen.org.

THE SPIRITUAL SEEKER TODAY, THE POSTMODERN seeker, is in a unique predicament. For those of us looking toward the future who long to develop at the level of consciousness, it is often difficult to find a spiritual path or practice that makes *deep* sense. It's difficult to find a spiritual path that has a truly contemporary orientation – one that doesn't compel us to embrace ancient belief structures that may no longer be relevant to our time. This is the great challenge of spiritual development today, but it could not be more thrilling, because it is so pregnant with creative potential. It is up to us to create a new context for our individual and collective spiritual development, one that is appropriate for our twenty-first-century circumstances. It is up to us to create a new Enlightenment.

This is the challenge to which I have dedicated more than two decades of my life as a spiritual teacher. And in the process, I have discovered a new source of emotional, psychological, and spiritual liberation that exists within anyone's reach who has the eyes to recognize it and the heart to desire it. It is not the old, traditional Enlightenment, the transcendental destination of timeless Being that the Buddha and mystics throughout the ages have described as the ultimate prize and final goal of all spiritual striving. It's not the awakening to the Self Absolute that Krishna revealed to Arjuna in the Bhagavad Gita, India's ancient Bible for all aspiring seekers of spiritual liberation. It's also not the "power of Now," the most popular expression of the Old Enlightenment

in our own time. No, it is an entirely different and new domain of the Self that I'm pointing to as the font of our liberation. It's one that most people have not discovered yet.

It took me many years of deep introspection, dialogue with luminaries from all traditions, and committed work with thousands of spiritual seekers around the world to begin to understand what this new Enlightenment is all about, why it is so different from what has come before, and why I believe it holds the key not only to our personal development but to our cultural evolution. In the pages that follow, I will share with you the journey I took from the Old Enlightenment to the New Enlightenment, and endeavor to transmit the power and promise of this extraordinary potential that is now within our reach.

QUESTIONING TRANSCENDENCE

I became a spiritual teacher in 1986, after a powerful awakening irrevocably transformed my life. My own teacher came from the Advaita Vedanta tradition, and it was the timeless simplicity of this ancient teaching that catalyzed my awakening. The essence of this realization was simple: everything IS as it is. It was a classic *satori* or enlightenment experience – seeing through the illusion of time, directly into timelessness; awakening to the eternal Now, the mystical, absolute, nondual, non-relative Ground of Being. My teacher taught me, as he'd been taught by his own teacher, the great saint Ramana Maharshi, that what I was looking for was already present as the very ground of my own awareness.

That ground, the deepest dimension of who we all are, always already exists prior to time and the creative process. That is why mystics throughout the ages have told us that there is nowhere to go and nothing to do except to realize THAT. After my own awakening to this timeless truth, initially, I taught others in the same way that I had been taught. For the first few years of my teaching career, my spontaneous response to those who came to me was simply this: *Realize and surrender. Realize that mystery that cannot be understood by the mind, and surrender to that and that alone. Realize that you were never born. Surrender to the fact that you were never unfree. Realize there was never a problem and never back down from that realization. Surrender*

to that and that alone. I was convinced beyond doubt, by my own experience, that there was nowhere to go, nothing to do, and no one to be or become. In fact, at the time I was so sure about this view that I seriously questioned the authenticity of any teaching of enlightenment that implied that awakening took time and that there was anything in the future to become other than who we already always are.

This traditional Eastern approach to Enlightenment is what the mystics have taught for thousands of years. The goal it points to is essentially *transcendence* – a radical release or escape from time, mind, and world that is found when one awakens to the timeless, formless domain of Being. For traditionalists, this other-worldly emphasis on transcendence as the goal of enlightenment hasn't changed since the Buddha preached the dharma in ancient India 2500 years ago or since Adi Shankara wrote his *Crest Jewel of Discrimination* in the eighth century. And for us postmodernists, it also hasn't changed since the glory days of the 1960s when Harvard psychologist-turned-psychedelic rebel Richard Alpert, aka Ram Das, published his ground-breaking spiritual manifesto and call-to-arms *Be Here Now!* Almost forty years later, spiritual bestsellers are proclaiming the same message: Transcend the mind and time. Rest in the “now,” in the infinity of the present moment, because the Self alone is real. All else is a temporary illusion.

From this perspective of radical transcendence, the world and all of manifestation is a mere “play” of consciousness, or *lila* as it's called in Vedanta. What happens here is not ultimately real. Only the Absolute, unchanging, timeless, formless, unmanifest Ground is real. Therefore, nothing needs to change in this manifest world, and true freedom is found in escaping from it altogether. Why entertain an illusion? Why try and improve that which is not real in the first place? But for me, this perspective soon became problematic. I observed that many who came to me in those early years found themselves plunged into the same miraculous state of liberated consciousness that I had discovered, but the *effect* of this powerful experience was not the same. In most individuals, it seemed, awakening to the bliss of Being did not automatically lead to radical transformation. And to me, it always seemed obvious that the power and significance of that which is Absolute is given validation only through our ability to stand for and embody its glory as ourselves – through action, through choice, through the way we live in the world of time and form.

As I began to engage more deeply with those around me, I discovered that the state of the individual's soul – their capacity for integrity, authenticity, and higher conscience – always played a critical role

in determining how ready they were to embody to their own deepest realization. So I began to put more and more of my attention on the all-important question: How can we cultivate the ability and readiness to *express* the beauty, perfection, and wholeness discovered in spiritual revelation? This was the beginning of a radical divergence from the path and perspective my teacher had taught – a divergence that would eventually lead to the dissolution of our relationship. To put it simply, my teaching was becoming more and more about the transformation *of* the world; his was about liberation *from* it.

The differences in the way we were seeing were based upon how we were defining what enlightenment meant. In the traditional Eastern metaphysical perspective, the world isn't real, it's only an ephemeral appearance, an illusion, a mere insubstantial, transient dream in the mind of God. I felt differently. I was convinced that the world was definitely real and an inherent and important part of what the transcendent Godhead always is. For millennia, this has been an ongoing metaphysical argument for sages, seers, and philosophers. And it is a significant one. If the world isn't real, and the mind isn't real, then nothing needs to be done about the way things are out there, or the way things are in here. But if the world is real and it becomes apparent to us that in fact it needs improving, then that means that there is real work to be done. This work was what my life was now devoted to. I was wholeheartedly committed to bringing the power of enlightened awareness *into* the world through rational action, through moral being, and through engaging with the process of time in the most deliberate and creative way.

I have always been convinced that enlightenment has to make sense, and that the experience of higher nondual states should not be used as an all-purpose justification to sweep relative distinctions under the carpet when they are inconvenient. In those early years of my teaching career, it gradually dawned on me that I was going to have to figure out for myself how to translate the profound awakening I had experienced into a form that would make deep sense to the world I was living and working in. I knew that the questions I needed to answer in order to find my way forward were important beyond just my own experience. They were questions about new ways to interpret the meaning and purpose of enlightenment as it travelled from its roots in the traditional East to its new home in the postmodern West. The answers I was looking for were answers that others were also looking for. So, as I was in the process of asking the important questions to further my own development, I attempted to include as

many other interested souls as I could. This is why I eventually founded the magazine *What Is Enlightenment?* (later renamed *EnlightenNext Magazine*) in 1992, as a vehicle for this important inquiry. But I could never have predicted where it all would lead.

A MORAL IMPERATIVE

In my own experience, the profound discovery of consciousness or Spirit has never been separate from the awakening of what appeared to be a moral imperative. What does that mean? It means that not only do we discover that at the level of consciousness, we are not separate from who and what God is, but simultaneously that which God is – that Absolute principle – seems without words to scream to our body and mind and soul that we *have* to do something to make the world a better place. This discovery of a moral imperative is not uncommon as an inherent part of mystical awakening.

At first the profound revelation of nonduality, and the immediacy of pure consciousness, is an experience of unconditional freedom from the tyranny of the mind and the prison of time. But in a mature seeker that inner freedom soon transforms into an obligation. It is an obligation to bear witness – an obligation to stand strong and true, fearless and confident as a witness to the absolute truth that Consciousness, Spirit, or God is the ground of all Being and the source of all that is. That obligation of bearing witness commands the realizer, in all of his or her imperfection, to be the exemplar of the inherent goodness, purity, or unselfconscious innocence and inherent perfection of Spirit's true face. And moral being *is* that face.

Back when I was struggling to make sense out of my own experience, my differences with my teacher, and the many contradictions of the East-meets-West spiritual marketplace, these were the kinds of issues I was wrestling with. I was convinced that the expression of spiritual illumination in the world has to be the manifestation of a higher moral conscience and context, otherwise it lacks purpose. If spiritual enlightenment is only the attainment of a higher state – no matter how high, subtle, or rarefied it may be – if the riddle of existence has been solved and yet, as a human being, the enlightened one remains an un-integrated, narcissistic, and even self-destructive individual, then what's the point? God reveals his or her glory through the power of an awakened heart shining through the eyes, mind, and body of the enlightened self. Our faith in Him or Her or It is in many ways dependent on the goodness not merely of spiritual states but of our humanity.

It became increasingly clear to me that enlightenment for its own sake was ultimately meaningless.

But enlightenment for the sake of the sacralisation of the world was inherently purposeful and bestowed infinite meaning to the human experience. Because my roots are in the Eastern Enlightenment, I have always steadfastly upheld the traditional perspective of Vedanta and Buddhism – that *consciousness is the ground of all being*. But my interpretation of that realization, I discovered, had more in common with the perspective of mystical Judaism or Mahayana Buddhism – paths that call on us to live the religious life in order to transform the world by being the vehicle through which the living light of that immortal Spirit would enter into it. From this perspective, the profound awakening to Consciousness as the infinite and empty ground of Being is not an end in itself. The whole point of spiritual awakening is to understand this simple truth at a soul level, and once it is understood, to courageously live it out loud with all of one's heart.

As the years passed, this new emphasis emerged more and more powerfully in my teaching. I found myself imploring those around me not only to awaken to their true Self as timeless Being, but to dare to respond to the urgent call to express that liberation in the world of Becoming. The awakening passion I was feeling was a passion for much more than Enlightenment in the traditional sense. The spiritual energy that was running through my veins was calling me to a new expression of enlightenment – one that was free from the time-worn shackles of the great mythic traditions, shackles that inevitably get revealed as they clash with the values of modernity and post modernity. It was an enlightenment that by its very nature could never be content with the way things were in the past, no matter how glorious that past may have been. It was an enlightenment that would also never be content with how things are in the present moment, even at those rare instances when everything seems like it couldn't be more perfect. It was an enlightenment that was defined by a ceaseless and ecstatic reaching forth towards an as yet unborn and unmanifest potential. A constant stretching towards a future perfection that would *always* lie just beyond one's fingertips. My inner eye and heart were focused on the freedom of that mysterious place between the immediacy of the present moment and the endless thrill of the possible.

AWAKENING TO EVOLUTION

The process I went through coming to these conclusions was a long, slow, and deliberate one. The multidimensional complexity of human nature and the way our spiritual worldviews evolve over time is a

bigger and more complex matter than it may initially appear. And this is because our culturally inherited perspectives have a big influence on the way we see just about everything, including Spirit itself. It took me some years to realize that the differences between my own emerging teaching and the tradition I had come from were really about the evolution of culturally inherited values and perspectives, more than anything else. How we define the highest truths and interpret their significance is always dependent upon the actual conditions and circumstances of our lives. This is why the world and circumstances we're living in today require a radical rethinking of those perennial truths and what they really mean for us here and now.

Slowly but surely, in my quest to redefine Enlightenment, I began to connect it to the most important emergent narrative of recent cultural history: the discovery of Evolution. Seeing our presence in this world from the vantage point of a fourteen-billion-year process powerfully recontextualizes the spiritual impulse in a thrilling, rational, and deeply meaningful framework. In this context, we realize that awakening to timeless Being, the perennial goal of the Eastern Enlightenment, is only half of the picture – *half of the totality of reality*. The other half of the picture is the world of Becoming – the universal creative impulse, that explosion-in-motion that is the entire 14-billion-year evolutionary process that we are all part of. If Enlightenment is the discovery of what IS, then it must embrace the ultimate nature of all things – seen and unseen, known and unknown. And I think the most truly all-embracing and inclusive definition of reality includes both *Being* and *Becoming*.

Being is that timeless void out of which the cosmos was born, the empty ground from which everything arises and to which everything ultimately returns. Becoming is the something that emerged out of nothing and is still emerging in this moment. Becoming is Eros, the evolutionary impulse, the first cause, that original spark of light and energy that created the entire universe. And I realized that it was that very same creative spark that was now awakening in my own heart and mind, as a sense of ecstatic urgency to *evolve*. This is why I began to reenvision the very goal of the spiritual path, seeing the purpose of enlightenment as not merely to transcend the world, as I had been taught, but to *transform* the world, through becoming an agent of evolution itself. Enlightenment was not the end of the path, but merely the beginning.

In the East, they believed that enlightenment was a final endpoint, a monumental attainment that marks the end of becoming for the individual. Someone who is enlightened has liberated himself or herself from identification with anything that

exists in time. And this conclusion makes sense when you consider the cultural context in which it emerged. In ancient India, they had not yet discovered evolution. Like most of the world at that time, they had not yet discerned that time had a beginning and moved in a straight line from the past to the present to the future. They believed that time, like life and death, was a repetitive process that was constantly going through the same cycle and would for eternity. As a matter of fact, many Hindus in modern day India still prefer to see our cosmic origins through the lens of their ancient Vedic science, rather than accepting the findings of Western science and modern cosmology. And if reality is seen through this particular cultural lens, it would make sense that one would soon grow weary of the eternal tedium of cyclical existence and hunger for a final release. That's why the traditions say that the individual who is "fully enlightened," who has gone all the way, is that rare one who had finally achieved emancipation from the endless repetition of birth and death on the wheel of endless becoming.

It's important to remember that up until very recently in human history, we didn't know that we are all part of a developmental process that had a beginning in time and that is *going somewhere*. Many of us tend to forget that it was only in the twentieth century that we came upon what is known as "deep time" – the incomprehensible span of fourteen billion years since the universe burst into being. When we apply the perspective of evolution to the nature of enlightenment, it changes *everything*.

From the perspective of the eternal timeless ground, the traditional teachers are right. The highest spiritual truth is that nothing ever happened, you and I were never born, and the Big Bang never occurred. That's enlightenment, that's liberation, that's *samadhi*, that's *satori*. But from the perspective of evolution, the entire picture changes in the most dramatic way possible. Modern science and cosmology have clearly revealed that time doesn't move in predictable cycles that ultimately keep returning to the same point, but in fact is a linear process that is *going somewhere*. Fourteen billion years of development have produced all of manifestation – the entire known universe and everything that's contained within it, including its greatest mystery, the capacity for consciousness itself. The arrow of time is a *creative* process and that capacity for creativity and novelty is the most miraculous part of the whole dramatic unfolding – from the Big Bang to the present moment. This is not just another repetition of an endless cycle. This hasn't all happened before and where we are going is not predestined. What an amazing adventure! What an exciting time to be alive.

And the most exciting part of this realization is that we discover, if we look deeply into our own experience, that our own emerging desire for spiritual freedom is not separate from the impulse that is driving the entire process. I call this the Evolutionary Impulse. When we awaken to this impulse, we discover something miraculous: that that dynamic and ever-evolving creative principle is none other than our own Authentic Self. This is the new source of spiritual liberation in the teaching I have come to call Evolutionary Enlightenment. It's not just about awakening to timeless being – it's about awakening to eternal, ecstatic Becoming. Evolutionary Enlightenment calls on us to awaken to both the timeless peace of Being *and* the relentless passion of the Evolutionary Impulse.

DISCOVERING OUR COSMIC PURPOSE

One of the most important messages these days that I consistently endeavour to transmit to my audiences and to my students all over the world is a palpable sense of urgency and purposefulness that wakes us up at the deepest level of our being when we discover this Evolutionary Impulse or Authentic Self. It is a direct and powerful experience, based upon the spiritual revelation that we are indeed all part of a cosmic process that started with the Big Bang and has been unfolding for fourteen billion years – from energy to light to matter to consciousness to self-reflective awareness. As we awaken to this vast perspective, an overwhelming and profound truth becomes clear: *At this point in evolution, that process is dependent upon us.* The next step will not simply emerge by itself – it must be consciously created by human beings who have awakened to the impulse that is driving the process. *The evolutionary process desperately needs our conscious and committed participation* – this has become the defining theme and ultimate purpose of Evolutionary Enlightenment over the last ten years.

In this profound awakening to our cosmic destiny, we not only find meaning, purpose, direction, and context, but something even more significant happens. The trajectory of our lives is abruptly plucked away from the tiny world of the personal ego. Now we find ourselves in a completely different universe, a domain where the fears and desires of the separate self are always seen as being secondary to something higher, deeper, sacred, and inherently meaningful.

When something so much deeper and higher than ourselves comes into our everyday awareness, we simply don't have time for the ego's petty fears and

concerns any more. We discover that we are responsible for something infinitely greater. We find ourselves connected to a superhuman passion and creative power that is coming from the Source itself. And we become so consumed by its ecstatic nature, by its dynamism and inherent, explosive freedom, that all of the ego's self-concern, and all of the limiting ideas of our cultural conditioning just seem to be irrelevant. Something more important has entered into the very centre of our being, and our heart has become enamoured with that. In this way, our personal salvation and liberation becomes simply a spontaneous by-product of our passionate care and sense of responsibility for the evolutionary process itself.

In Evolutionary Enlightenment, this is the paradoxical way that transcendence of the ego – which has always been a traditional goal of enlightenment – is achieved. Ego is full of narcissistic self-importance, but it never wants to take on the burden of this kind of awe-inspiring responsibility, because in so doing the individual becomes bound by an absolute moral obligation. Awakening to the Evolutionary Impulse or Authentic Self implicates the individual in the most profound and dramatic way. It says, "The universe is depending on *YOU*." And this is exactly why it has the power to completely unseat the ego in a way that I don't think anything else can. The ego loses its freedom to act merely in its own self-interest, but not, as in more traditional paths, through seeing its personal insignificance. Ironically, it is transcended through seeing quite the opposite: our cosmic significance. The solution to the exaggerated sense of self-importance that afflicts most of us is not to feel less important, but to discover just how important we *really* are. There is no greater challenge to narcissism than awakening to cosmic conscience: to the fact that *it is up to us to create the future.* And I can't think of a more pertinent spiritual revelation or transformative message for any seeker, but especially for us narcissistic, self-concerned postmoderns, than this one. After all, how else could we ever truly liberate ourselves from the all-consuming distraction of our own culturally-conditioned egotism and selfishness than by the overpowering recognition that without our personal cooperation and participation, that which is highest will not be able to enter into this world?

ENLIGHTENMENT BEYOND THE INDIVIDUAL


Evolutionary Enlightenment, as it developed and came into focus in my own awareness, revealed itself to have a significantly different philosophical framework, perspective,

and purpose than traditional enlightenment. And as I worked with students around the world to bring this new enlightenment into being, it also revealed itself to have a completely different expression. To put it simply, traditional enlightenment has always pointed to an *individual attainment*. Evolutionary Enlightenment, I discovered, was about a *collective emergence* – a *shared* experience and expression of higher consciousness.

This new “*intersubjective*” expression of enlightenment initially emerged quite unexpectedly among my students. It became obvious to me that at times the space between them was charged with the light of awakened consciousness. I was stunned as I witnessed how enlightenment comes alive and becomes manifest in a uniquely creative and inherently meaningful way beyond the individual. *In shared higher states, beyond the personal ego, a new world comes into being.* A new world that was compelling that it eventually made sense out of all the questions I had been struggling with. As I saw this extraordinary phenomenon emerge, it seemed to be clearly where the future lay for those of us who were desperate to create something new. That’s when the sky seemed to open up and all things became possible here on earth. This became a fundamental theme in the continuing emergence of the new enlightenment: *Coming together with others in a higher state of enlightened awareness beyond the personal ego.*

Especially for those of us who grew up in the alienated age of the individual, there is something so incredibly life-affirming about the kind of joy and fellowship that emerges when many human beings, inspired by spiritual values and a higher sense of purpose, come together. The spiritually enlightened and awakened life – if it’s to have any real impact on the world – is about creating and sharing higher values with other human beings. Any individual can experience liberating insight and clarifying revelation in the privacy of their own subjective interior. But when insight and revelation are being experienced as part of a shared higher state, something truly sacred begins to occur. The potential of a new, more enlightened world emerges here and now. And then, when it is not only seen but also *acted upon*, that which was only an unmanifest potential suddenly becomes a powerful manifest reality. We see and feel the world change before our very eyes in the most real way imaginable. And when we have the repeated experience of sharing higher states and truly new perspectives with others, an inner earthquake is catalyzed – one that gradually uproots and brings light to the smaller perspectives and less enlightened positions and ways of seeing that we were unknowingly and unconsciously adhering to prior to discovering a higher view.

What I am now teaching is in fact a cultural shift in the way that we think about the meaning and purpose of spiritual experience. Any kind of cultural movement for change, from political to spiritual, is always based upon the sharing of higher states, perspectives, and worldviews with like-minded individuals. And in an enlightenment context, there is an added dimension. In this case, the direct experience of the ground of Being, of the awakening to consciousness itself, is the very basis for that transformation. Because of that, one is entering into a new order of relatedness and shared cultural transformation – a “higher We” that is potent and empowered with the euphoria of spiritual energy and the unique conviction that comes only from experiencing a confrontation with the sacred.

When enlightenment emerges beyond the individual, self, culture, and cosmos literally begin to evolve before our very eyes. That means that the world we occupy and cocreate begins to transform *as we do*. The old model of enlightenment was one in which the individual transformed but the world remained the same. In the new model, the point is no longer merely the transformation of the individual; it’s the evolution of self, culture, and cosmos *through* the individual. When several or many take that all-important leap beyond ego *at the same time*, that’s when the new enlightenment tangibly enters into the creative process. That’s when our greatest potential – to consciously evolve *together* – actually becomes manifest in the real world, here and now. 



COYOTE ENLIGHTENMENT

A STORY OF EVOLUTIONARY SPIRITUALITY

ALLAN COMBS



Allan Combs is the Director of The Center for Consciousness Studies at the California Institute for Integral Studies. He is the author of over two-hundred articles, chapters, and books on consciousness including the award-winning *The Radiance of Being*; *Consciousness Explained Better*; and *A Victorian's Guide to Consciousness*. Email: acombs@ciis.edu.

The universe evolves in consciousness of itself and causes itself to be. We are just this blessed consciousness, nothing more and nothing less. We are the light inside light that fuses into the atoms of our bodies; we are the fire that whirls across the stellar deeps and dances all things into being.

DAVID ZINDELL¹

EVOLUTION

THE COSMOS ABIDES IN ITS OWN FULLNESS, YET paradoxically strives toward ever greater abundance. During each living moment all things are complete as they are, exactly as they must be, while paradoxically striving toward greater efflorescence. This is the universe in which we live, and in which we participate as citizens and creators. The truth of these facts rings through the sacred stories told in many cultures and many eras. It is found in the books of great philosophers, and in the notebooks and on the computer screens of modern scientists.

When researchers look closely they find evolution's footprints everywhere. In the words of Ukrainian geneticist Theodosius Grygorovych Dobzhansky, "Nothing in biology makes sense except in the light of evolution." But evolution is also essential to any modern understanding of geology, astronomy, cosmology, and all the sciences that take a long view of the natural universe. What is new is that more and more people today are looking to their own *inner* evolution as well, an evolution of consciousness; and what this might mean for our potential futures as individuals and as a species. We experience the call of evolution as a yearning to embrace and embody within ourselves that spark of creative energy that

early Greeks called *Eros*, the firstborn spark of love and creativity. It is this spark that ignites the human spirit in many forms that in turn reflect differing worlds of experience, or *life-worlds*, in which we humans live. These differ according to our individual circumstances, including the culture in which we live, our personal beliefs, and our own individual life experiences and maturity.

One important strand in all this is the form, or "structure," of consciousness through which each person experiences his or her lifeworld. A helpful way to understand these structures is in terms of a discovery made nearly a century ago by the European cultural historian Jean Gebser. Looking deeply into history he found that different periods or epochs have been characterized by different "structures of consciousness" that can be recognized by of how people in them grasped the basic facts of their existence. Questions such as "What is my role in life?", "Why is there so much suffering?", and "What is the meaning of death?", are held differently according to the structure in which they are asked.

Through an intensive study of art, philosophy, science, and literature, as these played out through history, Gebser identified four basic structures that unfolded in rough historical order². These are magical, mythic, mental, and a newly emerging integral structure of consciousness. Each represents a complete lifeworld to those who inhabit it. With this in mind, let us take a brief tour through these structures, keeping our eyes open for evidence of spiritually informed ideas and beliefs about evolution and enlightenment.

THE MAGICAL STRUCTURE OF CONSCIOUSNESS: COYOTE CREATES THE WORLD

Many of the most colorful stories of *Eros* are found in the magical tales of creation recited in tribal communities throughout the world. These tales often depict the primeval kosmos as filled with water, a lake or a sea, out of the depths of which an original numinous being brings up soil and creates the first dry land. Often this being is a trickster. For instance Maui, the powerful Hawaiian trickster, fishes up islands from the bottom of the sea, pulling them together

to form Polynesia. According to many Native American tales Old Man Coyote created the world. In a version told by the Crow Indians, Coyote sends a duck diving down into the waters to come up with a beakful of mud, which he spreads around to make the dry land³. Anansi, the devilish West African spider trickster, is likewise said to have created the world. There are many stories of Anansi's escapades, perhaps as many as the adventures of Coyote.

One can't help but wonder why so many creation stories involve tricksters. What is it about these universal but impish creatures that create worlds and then make so many unexpected things happen in them? It seems that the essential role of all tricksters is to stir things up, produce confusion, and make sure the status quo doesn't last forever. In this the trickster is perhaps the first and purest form of an elemental creative impulse, a first spiritual incandescence, unbounded and undomesticated. For traditional peoples living in primary cultures the trickster seems equivalent to the primal fireball of creation for a modern scientific mind: the beginning and source of everything. Perhaps it is not surprising, then, that tricksters play so many other roles as well. For example, they may act as go-betweens for humans and gods. Hermes, the highly developed Greek trickster, was known as the "messenger of the gods," the master of thresholds and transitions, and the "friendliest of gods to man"⁴, it is he who guides the souls of the dying on their journey to the underworld. He appears in both the *Iliad* and *Odyssey* to lead the hero Odysseus and old King Priam across dangerous thresholds. As an expression of the magical structure of consciousness the trickster assumes many roles and performs many tasks.

THE MYTHIC STRUCTURE OF CONSCIOUSNESS: FROM INANNA TO JEHOVAH

The mythic structure of consciousness was first associated with the rise of agriculture, and with it a shift away from the nomadic societies of the early (Paleolithic) stone age to larger farming (Neolithic) communities. This occurred roughly twelve thousand years ago in the Middle East, but soon afterward in China and India as well. Agriculture is a cyclic business, planting seeds in the spring, tending crops during the summer growing season, harvesting and storing the fall grain in preparation for winter. Perhaps it is not surprising that the earliest mythic forms of spirituality emphasized seasons and cycles. Even today festival days such as Christmas and Easter echo these seasonal transitions. In fact, mythic consciousness gave birth to many of the world's major religions. It

is associated with great gods and goddesses rather than the local spirits and deities of magical consciousness. Perhaps the earliest among these was the nearly universal earth goddess, signifying fertility and symbolized by the creative darkness of the night and the moon. Embodiments of the great earth goddess were still widely worshiped during antiquity in forms such as the Sumerian Ishtar (Inanna) and the Egyptian Isis. In fact, the worship of Isis continued right down into the Christian era as a contender with Christianity during the latter's early days.

Long before Christianity, however, came the rise of the great sky gods such as the Egyptian Ra, symbolized by the sun and the hawk, Greek Zeus, associated with lightning and the eagle, as well as the Hebrew Jehovah⁵, and in the Americas the Aztec "feathered-serpent" Quetzalcoatl. Even today many major religions embrace stories of creation as the acts of such great gods.

While providing guidance and meaning to the lives of large numbers of people, mythic spirituality in the form of organized religions has often put narrow constraints on expressions of Eros. There are many reasons for this clampdown, including the invention of writing in the ancient world, thus allowing the preservation of specific and privileged doctrines over long periods of time, as well as the establishment of priesthoods with fixed powers derived from such doctrines. Beyond this, the doctrines of traditional organized religions offer a degree of psychological security, e.g. the belief in a caring God and afterlife.

Nevertheless, a spiritual energy that lies behind the surface of organized religion occasionally erupts into the lives of passionate individuals. Some of these have become prophets, some saints, and some have been persecuted or even put to death for their unmanageable behavior. Examples of such individuals in the Christian tradition include Meister Eckhart, Hildegard of Bingen, and more recently Teilhard de Chardin, as well as the Matthew Fox and the late Thomas Berry. Teilhard de Chardin and Thomas Berry both made the evolution central to spirituality. I will have more to say about them soon, but for the moment let us note that all except Thomas Berry were persecuted to some degree by the church. Late in his life, when asked over dinner where his own enemies were to be found, Thomas Berry replied dryly, "They are all dead!"

In summary, however, evolution has a hard time of it in mythic religion. Myths are about eternal truths and eternal beings, and leave little room for the transformative expressions of Eros. As Roberto Calasso points out in his wonderful reflections on Greek mythology⁶,

the Gods are not like humans, they are not living beings, but perfect eternal forms that do not evolve or change through time.

MENTAL CONSCIOUSNESS: GOD THE MATHEMATICIAN

Since its first appearance near the beginning of recorded history the reach of the mental structure of consciousness has transformed the entire world.

The mental structure became clearly apparent for the first time in the Greek pre-Socratic philosophers who downplayed the importance of the gods, or rejected them outright, and instead sought answers to questions about life and the universe in logic and empirical observation. Many Greek philosophers such as Pythagoras and Plato viewed nature in terms of mathematics. In fact it is sometimes said, with more than a little justification, that Pythagoras had the greatest influence on later Western science of anyone in history, much of which today is highly mathematical.

Through the roughly 1000 years of antiquity, when Greek and Roman culture dominated the Mediterranean and similar high civilizations flourished in India and China, rational thought became an important aspect of disciplines such as mathematics, engineering, and medicine, while older mythic and even magical influences continued to have a strong sway in cults, mystery schools, and major religions as well. With the fall of the Roman Empire in the West during fifth century AD, most of Europe slipped back into mythic and even magical consciousness, while the Eastern Roman empire retained significant rational elements for another half millennium. In fact, the Arab-Islamic empire continued to be a highly literary and scientific culture through most of the Western dark ages.

During the *Renaissance* in the West, however, the mental rational consciousness made a spectacular comeback, and even more so during the *Age of Enlightenment* shortly to follow. The 17th and 18th century intellectuals of the *Enlightenment* looked optimistically toward a future social and scientific order created by reason and free thought. Some of the important figures of this period included René Descartes, Isaac Newton, Voltaire, Benjamin Franklin, and Thomas Jefferson. The dominant religious orientation of these visionaries was a form of *deism*, according to which the universe was created in the beginning by a distant God, and continues on according to natural laws such as described in Newton's equations. This yielded a kind of bone-dry spirituality in which God was essentially no more than a principle of logic. The kind of rational theology that

grew out of this dry ground is seen in Spinoza and Kant's cerebral constructions of the cosmos. In its final and bleakest form it turns into existential theology, and finally into the absurd. The latter unhappy state of affairs offers one the choice each morning of having a cup of coffee or committing suicide, thus putting an end to a pointless life.

THE MENTAL DISCOVERY OF EVOLUTION

Despite the long history of the mental structure of consciousness, evolution as we think of it today did not enter the world of intellectual, or spiritual, discourse until early in the 19th century. Among the first to conceptualize the cosmos in a way that emphasized an inherent forward transformation were the German "Idealist"⁷ philosophers such as Johann Gottlieb Fichte, Friedrich Wilhelm Joseph Schelling, and Georg Wilhelm Friedrich Hegel, all of whom proposed an historical progression that reflects an increasingly intimate relationship between human experience and some form of God or divine spirit. Hegel was the most influential of these, and continues so in philosophical thought even today. Nevertheless, it was perhaps Schelling who was the most explicit about the idea. As early as 1809 he wrote, "God is Life, and not merely Being. All life has a destiny, and is subject to suffering and to becoming. To this, then, God has of his own free will subjected himself [...]"⁸ Here we might add Hegel's reflection, "That the history of the world, with all the changing scenes which its annals present, is this process of development and the realization of Spirit. Spirit is indeed never at rest but always engaged in moving forward"⁹. Thus, the German Idealists pictured the cosmos, including life, and especially human life, as the very embodiment of the divine, or in Hegel's terms, the *Absolute Spirit*. For Hegel the cosmos was the Absolute Spirit in the great act of actualizing itself through the forward movement of history.

There had been earlier religious and philosophical systems that stressed the embrace of the manifest world by divine spirit. Ancient Roman stoicism, for instance, viewed the entire universe as a divine living body with all parts interconnected. Late in the Italian Renaissance the priest and mathematician Giordano Bruno believed God to be immanent in the material universe. But neither considered the cosmos to be in any kind of systematic forward progression. Likewise, the Hindu idea of Brahman as infinite spirit does not evolve or change, but is eternal in its presence.

It is worth noting, however, that while the German Idealists grasped a powerful integral intuition, informed by both the intellect and the mythic imagination, it is also true that they leaned strongly toward a mental-rational expression of it. Hegel, for example, considered the

deep structure of reality to be the intimate expression of God's thought, a strongly mental view in keeping with the highly rational European Enlightenment tradition from which he came. Nevertheless, these philosophers produced a clear and powerful vision of a divine ground of being that (or who) acts both through and within the manifest world, gradually manifesting not only through the cosmos at large, but through history and the human drama. These great thinkers planted the seeds that would reach a new level of fruition in the thought and lives of the 20th and 21st century spiritual visionaries to whom we will soon turn.

DARWIN, NATURAL SELECTION, AND "THE MODERN SYNTHESIS"

It was Charles Darwin and his scientific contemporaries in the mid-19th century, who catapulted evolution as a biological fact into the spotlight of science, philosophy, and religion. This story is widely known. A point of importance to our present account, however, is the fact that Darwin's theory of evolution was remarkably influential because he proposed a convincing mechanistic explanation for the origin of new species¹⁰. This was the process of "natural selection," meaning that out of the variation seen between individuals in each generation of any species, those most well adapted, that is, best able to reproduce, would be the most likely to carry their offspring on into the next generation. Now, the important point here is that neither Darwin nor his contemporaries had any idea of how variation itself comes about. Darwin sometimes appealed to the Lamarckian notion, now long rejected by most scientists, that members of each generation benefited from the experiences of their predecessors. For instance, a giraffe that learns to stretch upward to eat the desirable leaves at the tops of trees might pass on a longer neck to its descendants, and perhaps also an urge to stretch upward to reach leaves in the tree tops.

All this may seem a bit aside from our present story, but it is important to understand that in evolutionary thought during the late 19th century, as well as the early decades of the 20th century, there was no widely accepted mechanism to explain variation within each generation. Thus, there was no generally accepted process by which evolution could move forward through changes of form. Sri Aurobindo made this point somewhat sardonically when in 1915 he noted the following rough translation of an ancient scripture.

One looks on it and sees a miracle, another speaks of it as a miracle, as a miracle another hears of it, but what it is, for all the hearing, none knoweth¹¹.

Some might still agree with this appraisal, but for most scientists the answer came late in the first half of the 20th century with the discovery of random mutations in the Mendelian genetic code. The latter provided the long sought mechanism for variation, and thus the basis for the principle of the "selection of the fittest." The incorporation of genetics into the theory of natural selection created "the modern synthesis," leading directly to the ideas of modern biological theorists such as Stephen Jay Gould and Richard Dawkins. The title of the latter's book, *The Blind Watchmaker*¹², explains his view of evolution completely: it is a fabric of accidents¹³.

Evolutionary theories of many kinds had become common by the beginning of the 21st century. Indeed, there is hardly any aspect of the world as we understand it today that does not bear witness to some form of evolution. For example, by the mid-1970s most cosmologists had abandoned the steady-state theory of the universe, worked out by Fred Hoyle in 1948, in favour of the Big Bang model that understands the cosmos as a vast expanding system of galaxies, gas clouds, dark matter, and dark energy, all moving through time and space on a grand evolutionary journey. Cosmologist Eric Chaisson¹⁴, for example, divides the 14 billion year history of the cosmos into seven epochs, each with its own evolutionary story¹⁵. These include the big bang and the early universe of energy and particles, the creation and evolution of galaxies, stellar evolution, planetary evolution, the origins of the complex chemicals that make life possible, the evolution of life itself from primitive cells to entire bodies and brains, and finally social evolution during the history of humankind.

This brief history of the development of Darwinian evolutionary theory is important for our own story of evolutionary spirituality because it illustrates the fact that until well into the 20th century the question of what pushes biological evolution was still very much an unsolved mystery. Combine this with the belief, common in those days that evolution moves in an overall upward direction, toward increasingly intelligent and conscious forms of life, and we see that ideas of various forms of spiritual, or at least subtle, influences might easily be thought to provide a guiding hand.

The great spiritual evolutionaries of the turn of the century such as Sri Aurobindo, Henri Bergson, and Teilhard de Chardin, who actually did his major work on evolution in the 1930s, as well as popular figures such as Madam Blavatsky, all appealed to guiding influences that lie beyond matter itself. Even today most spiritual evolutionaries, including scientists in many fields, believe there to be more to the picture than

random mutations and selection of the fittest. As the British economist E.F. Schumacher observed, just because you see a man picking up coins from street doesn't mean he makes his living that way¹⁶. But with the development of "the modern synthesis" along with the trend toward reductionistic materialism that dominated much of the 20th century, it is only recently that the scientific community is again questioning whether the whole story of evolution can be attributed to accidental physical processes.

EVOLUTIONARY SPIRITUALITY AND THE INTEGRAL EMBRACE

SRI AUROBINDO'S INTEGRAL YOGA

Now, let us return to the final decades of the 19th century when Darwin's theory was resonating in the minds of everyone who was thinking seriously about human nature. Even the most rational men and women were grappling with the disturbing notion that our forebears were, if not actually apes or monkeys, then at least some from of prehuman primates¹⁷. One troublesome side of all this was the question of the human soul. Those who entertained occult or metaphysical beliefs had to ask whether the soul, or whatever aspect of human nature survives bodily death, is also subject to evolution. Many of the foremost intellectual figures of the Victorian Age grappled with this question¹⁸, and it is still a matter quit open for discussion.

Evolution, however, is a big idea, and for those willing to embrace it completely it presents a new vision of the cosmos and all life within it. One of the first great minds to harvest this vision in a spiritual way was Aurobindo Ghose, later known as Sri Aurobindo. Raised and educated in Victorian England as was common for the male heirs of upwardly mobile Indian families, he attended Cambridge University. But he moved to India, his homeland, in 1893 rather than pursuing a career in the British Foreign Service. Soon afterward he experienced the first of several spiritual awakenings that would eventually determine the direction of his life. During those early decades of the 20th century Aurobindo developed a type of "integral yoga" that conceptualized individual spiritual transformation in evolutionary terms. This was not a Darwinian approach though, but rather a reconceptualization of traditional stages of yogic development. What made it "integral" was that it did not aim to release the spirit from matter into some higher state of transcendence, but to integrate and spiritualize the entire mind and body on all levels. In plain English, it aimed to bring divine energies *down* into the mind and even the material body, transforming them into a

spiritual nature. Thus, it seeks to integrate mind, body, and spirit in a holistic or integral life unity.

Aurobindo's yoga is also "integral" in the sense that one carries it into the world of everyday life. In this way it is practiced even while going about one's daily activities. In the early days Aurobindo actually practiced it as a walking meditation, and continued his discipline even while working as a writer and editor for the controversial newspaper *Bande Mataram*.

The actual practice of integral yoga is strongly mental in orientation, well known for activating the mind before enlivening the emotions and the body itself. In this sense it is said to be the opposite of traditional forms of yoga, most of which begin by energizing the lower chakras and only after considerable practice and discipline reach the higher centres of consciousness and the intellect.

JEAN GEBSER'S INTEGRAL CONSCIOUSNESS

Though not himself a spiritual teacher, Jean Gebser's ideas have influenced many spiritual thinkers, including Ken Wilber who based much of his own thinking on Gebser's structures of consciousness. Indeed, this chapter is organized in terms of these structures. For this reason it will be useful to introduce his concept of integral consciousness here, even before moving on to some of the spiritual evolutionaries of the late 20th and early 21st century.

Gebser's notion of integral consciousness recognizes that all the earlier structures of consciousness still live in each of us, and in his view it is the integration of these into a single flow of experience that gives us integral consciousness. This, plus a certain value-added quality in the form of a kind of subtle illumination that Gebser termed the *Light of the Origin*¹⁹, increasingly lost through history since the distant magical era.

In principle, full-blown integral consciousness enjoys the spark of magic that enlivened the earliest experiences of humankind. It is this spark, still alive in us today, that gives us music, romantic love, dancing, and all those activities and states that collapse the distance separating us from one another. Integral consciousness also incorporates the mythic, with its flair for the imagination, for language, and for stories and art. Concerning the mental structure, little more need be said about it here, but let us note that it is needed to ground magic and mythical aspects of our experience, keeping them in touch with reality. In plain English, common sense is sometimes needed to manage the excesses of the other structures. Nevertheless, Gebser had great respect for mythic consciousness and the magical structure as well, as these together lend depth, delight, and meaning to our lives. Without them the world is dreary and meaningless.

It is worth noting that the full-blown integral experience is not unlike certain Zen mystical states. Gebser himself wrote to the great Zen scholar D.T. Suzuki after several days of what he took to be a period of integral consciousness. The latter wrote back that he had experienced an episode of genuine satori. A number of spiritual figures from the past seem to have experienced integral consciousness as well. For instance, Gebser identified the Rhineland mystics Hildegard of Bingen and Meister Eckhart. Based on my own reading I would also include the pre-Renaissance Neo-Platonist, Nicholas of Cusa, and many Eastern spiritual luminaries such as Sankara and Nāgārjuna. Gebser actually celebrated Sri Aurobindo as an example of the rise of integral consciousness in our own time. I would add Henri Bergson, Teilhard de Chardin, Thomas Berry, Ken Wilber, and Andrew Cohen, of whom I will have more to say shortly²⁰.

Interestingly, Gebser did not characterize his own ideas in evolutionary terms. His principle objection to doing so seemed to be that he did not want to be associated with the idea that everything has been getting better and better through history while the ancient past was primitive and rude²¹; an idea common in his day. Nor did he find the prospect of Social Darwinism attractive²². As noted above, he felt that humankind has drifted further and further from the light of the Origin since the early magical phase of consciousness. And he considered the present rule of the rational mind the most bleak and alienated of all. My own view on all this is that Gebser was a modern Neo-Platonist who used the term *Origin* in lieu of the old Neo-platonic term the *One*. Consistent with this he seemed to consider each structure already enfolded in the Origin, waiting as it were for the right moment to open out into the world. As we know, however, there are many potential uses of the word “evolution,” and Gebser’s objections seemed mostly pointed at the traditional Darwinian version.

Gebser was both optimistic and pessimistic about the future. He felt that a new age of integral consciousness was beginning to emerge, and could be seen especially in the art, poetry, music, philosophy, and even the science of the turn of the 20th century. But he also believed it might take as long as several centuries to develop on a broad scale²³. In the meantime he predicted considerable strife, and was not entirely confident of the outcome.

Now let us return to evolutionary spirituality.

EVOLUTIONARY SPIRITUALITY COMES OF AGE

While Aurobindo used evolutionary language consistent with his era, he did not actually invest in the wild creative aspect of evolution as we know it today. It is difficult to say who first caught hold

of this essence in a spiritual way, but several prominent philosophers, scientists, and theologians seem to have gotten onto the idea over the past century and a quarter, and there are many more who are less well known. To my mind a minimum list includes Henry Bergson, Teilhard de Chardin, Thomas Berry, Matthew Fox, Ken Wilber, and Andrew Cohen; with outriders including Alfred North Whitehead, Stuart Kauffman, and Ervin Laszlo. I would also include many if not most process theologians such as Charles Hartshorne and Arthur Peacocke. To review the contributions of each of these would take up volumes. But let’s not get the cart before the horse.

Sri Aurobindo originally wrote his monumental *Synthesis of Yoga* in serial form between 1914 and 1921 for the monthly periodical *Arya*. At that time the air was thick with discussions about the meaning and implications of evolution. Already in 1910 the French philosopher Henri Bergson had published an influential work titled *Creative Evolution* in which he presented a complete worldview ranging from cosmic to human evolution. He was later to develop a deeply thoughtful analysis of human consciousness based on memory and time. In all of his work Bergson stressed process over structure. He was enormously popular in both France and the US. And his *Creative Evolution* was translated into more than twenty languages. His lectures filled auditoriums to overflowing. Of him, William James wrote:

Oh, my Bergson, you are a magician, and your book is a marvel, a real wonder [...] But, unlike the works of genius of the Transcendentalist movement (which are so obscurely and abominably and inaccessibly written), a pure classic in point of form [...] such a flavor of persistent euphony, as of a rich river that never foamed or ran thin, but steadily and firmly proceeded with its banks full to the brim²⁴.

Bergson’s philosophy addressed the nature of consciousness, the roots of human freedom and morality, as well as many other topics, but none more central or important to his thought than his deep vision of a cosmos in which consciousness engages with matter in an onflowing evolutionary movement. Interestingly, many of these ideas were echoed by the South African statesman and philosopher Jan Smuts in his own 1926 book, *Holism and Evolution*. Smuts argued for the creation of wholes out of separate evolving elements as a fundamental rule of evolution. He often spoke of “[...] the tendency in nature to form wholes that are greater than the sum of the parts through creative evolution²⁵[...]” This emphasis on process and creativity in all forms of evolution aligned well with Bergson’s earlier thinking.

Perhaps the most profound philosophical system concerning process and evolution, along with Bergson’s own, comes from Alfred North Whitehead, a

leading British logician and mathematician who came to the US in 1924 to become known for his metaphysical “process philosophy.” Because of Whitehead’s considerable influence process philosophy is often thought of today as an American school of thought. Like Bergson, Whitehead did not espouse a particular religious orientation, though both were deeply interested in religious issues. Whitehead came from an Anglican Christian family and retained an interest in theology, while Bergson’s family was Jewish, though he was not a practicing Jew. Others developed Whitehead’s philosophy into the continuing field of process theology in the US.

Following the First World War much of the deep and reflective thinking that characterized the *fin de siècle* and the early years of the 20th century gave way to a Spartan empiricism that spread through virtually all intellectual disciplines. By mid-century logical positivism with its linguistic requirement of flat empirical reductionism dominated almost the entire academic landscape. One of my own students referred to this era, somewhat humorously, as a “reign of terror” for those interested in consciousness and depth psychology. In perhaps a more thoughtful mood the Trappist monk, poet, and theologian, Thomas Merton, in 1968 wrote of logical positivism, “Since we cannot really say anything about anything, let us be content to talk about the way in which we say nothing.”

Nevertheless, a few voices were trying to say something during the middle of the 20th century. One of these was that of the Jesuit priest, Pierre Teilhard de Chardin. Perhaps more than anyone else it was he who kept the flame of evolutionary spirituality alive during the repressive years of positivism. Nevertheless, his first book, *The Phenomenon of Man* was banned from publication, not by the positivists, ironically, but by the Catholic Church, only to be published by a personal friend after his death in 1955. It soon became a source of inspiration for many people who were desperate for a spiritual vision that incorporated evolution in a scientifically honest way without compromising spiritual depth²⁶.

It comes as no surprise that Teilhard de Chardin had been influenced by Henry Bergson. As a young man he became very interested in evolution, and is often thought of as an anthropologist as well as a theologian. His writing had a rigorous scientific edge to it, and with few exceptions stuck to well-established scientific facts and principles. It was, indeed, this rigor that led to his wide influence among scientists themselves. In my own view, no one ever got as much spiritual and philosophical mileage out of straight-on scientific facts as did Teilhard de Chardin, making virtually no appeals to weird quantum effects, action at a distance, and the

like, in my own opinion often overused by popular science writers today²⁷.

Teilhard de Chardin argued that evolution moves forward by the influence of consciousness itself, producing increasingly rich and complex physical structures that in turn support increasingly rich and complex mental and emotional structures. Bergson had argued for a subtle *élan vital*, or vital force, acting from outside the material organism. Teilhard de Chardin, on the other hand, spoke of *radial energy*, which influences physical events but requires little force itself. He observed, for instance, that the shape of one snowflake requires no more energy than that of another. Chemical reactions that lie at the basis of structural development make many “choices” that can be significantly influenced by the slightest leverage form consciousness in its urge toward greater evolutionary complexity.

Teilhard de Chardin suggested the evolutionary life of the spirit is pointed toward a state of ultimate unification he called the Omega Point. Though most critics so not accept this idea, it is worth noting that it suggests a mental-mythic image of a future state of something like human enlightenment. The relationship between the Omega Point and God was not made clear in Teilhard de Chardin’s work, but it is the nevertheless a vision of a unity state of spiritual illumination.

THOMAS BERRY

The spirit of evolutionary spirituality seems to have passed like a spark from Teilhard de Chardin to Thomas Berry, also a Catholic priest as well as a historian of religion, who during the latter decades of the 20th century became passionately interested in the spiritual dimensions of the cosmos, of the ecology of the Earth, and of all living creatures²⁸. It is clear from his heartfelt visionary speech and writing on these matters that he often spoke from the integral structure of consciousness. Berry, in fact had been deeply influenced by Teilhard de Chardin, and for many years served as the President of the American Teilhard Association. Indeed, Teilhard de Chardin’s own self-reflection about evolution sees to fit Thomas Berry as well.

*That magic word ‘evolution’ [...] haunted my thoughts like a tune: which was to me like unsatisfied hunger, like a promise held out to me, like a summons to be answered*²⁹.

Berry took great joy in the experience of wild nature, and so it is not surprising that he was deeply troubled by the deteriorating condition of the natural world, the destruction of its ecological balance, and along with this the declining quality of so much human and animal life. For him, the failure to adequately address these issues grows straight out of a failure to appreciate, connect with, and live a balanced life in the natural world. He believed that to make the adjustments that are called for we need more than patchwork

technological fixes and new environmental regulations. We need a fundamental realignment of what it means to be human. We need nothing less than “reinvent our species.

For Thomas Berry, the Earth, its wildernesses, and the wild animals that are our travelling companions on this little world, comprise our natural community. Beyond and embracing the planet Earth is the cosmos itself, or as Berry would sometimes say, the “universe.” The latter is the place of beginning for all exploration. The universe is, “[...] the only self-referential reality in the phenomenal world. It is the only text without context. Everything else has to be seen in the context of the universe³⁰.”

Berry was positive about the potential future for “the human” (his often-used phrase) because, he said, we have the resources of “ultimate powers of the universe” within our own spirit and grasp. They always stand ready to aid us. We need only become “sensitized to the spontaneities” that lie waiting within our own being; within our own wild human nature.

Berry was a Passionist Catholic priest, a historian, and a scholar, and so he did not speak of enlightenment as such. But it is clear that his many references to the spontaneities of our nature, and our innate place in the wildness of nature, amount to a deeply mystical worldview. In his own words:

The universe is so immediate to us, is such an intimate presence, that it escapes our notice, yet whatever authenticity exists in our cultural creations is derived from these spontaneities within us, spontaneities that come from an abyss of energy and a capacity for intelligible order of which we have only the faintest glimmer in our consciousness awareness³¹.

And

Wildness we might consider as the root of the authentic spontaneities of any being. It is that wellspring of creativity whence comes the instinctive activates that enable all living beings to obtain their food, to find shelter, to bring forth their young: to sing and dance and fly through the air and swim through the depths of the sea. This is the same inner tendency that evokes the insight of the poet, the skill of the artist and the power of the shaman³².

Berry might almost be said to have been a contemporary shaman, a wild man of the 20th century, who through his ecstatic joy in the natural world, through poetry, and through a deep spiritual appreciation of the universe, embodies the very qualities needed to save this anguished world.

EVOLUTIONARY SPIRITUALITY IN THE MULTI-PERSPECTIVAL ERA

In 2006, with the publication of *Integral Spirituality*, Ken Wilber³³ brought explicitly to spirituality, and

also to philosophy, what Picasso and Braque had brought to art in the first decade of the 20th century through cubism, and Heisenberg had brought to physics in 1927 in the form of the uncertainty principle, and Bohr in 1928 with the particle-wave duality; namely a multi-perspectival understanding of reality. This is exactly what Gebser had anticipated when he recognized the emergence, about that time, of the first glimmerings of integral consciousness.

Wilber’s multi-perspectivalism opened new dimensions to our understanding of human consciousness and, combined with Gebser’s notion that integral consciousness includes all previous structures of consciousness in a healthy synthesis, provided the right context for a new spirituality, one untethered by excessive rational constructions of the mental or the conservative emotional currents of the mythic. Few contemporary spiritual pioneers have taken full advantage of the space created by this new multi-perspectival worldview. Andrew Cohen, who is a personal friend and follower of Wilber’s thought, seems most notable in this regard.

In some important ways Cohen’s approach to evolutionary spirituality is reminiscent of that of Sri Aurobindo, written down nearly a century ago. Like Aurobindo, Cohen emphasizes the importance of two major stages of spiritual work, or “yoga” as Aurobindo would have called it. The first prepares the practitioner for the second and more profound of the two. For Aurobindo, the first was the Integral Yoga itself, with the goal of creating a divine transformation of mind, body, and spirit, catalyzed by a descent of divine energy or Shakti. The second stage, or “supramental yoga,” comes only after this work is complete. It strives to actually draw down transcendent energies and knowledge (*gnosis*) rooted above in the divine and never shrouded in matter. Ultimately this work creates a path and a way for a larger transformation of life in this world. The details of this process have never been entirely clear, at least to my mind, but Sri Aurobindo and The Mother, his partner in yoga, often spoke of their work as struggling to open a channel for the descent of divine transformative energies into the world.

Cohen likewise proposes two stages of transformational work. The first, which he identifies as common to most spiritual practices, involves the development of objectivity towards one’s own thoughts, feelings, and emotions³⁴. Along with this he emphasizes the importance of cleansing the mind of the ego, including especially the passions, so that at least at times, such as sitting in meditation, one experiences a sense of complete emptiness, and with it a clear openness and freedom. In other words, the first stage of the work, and an important one, requires a stepping back from the passions of

everyday life and settling into an easy clarity of the mind and spirit. At this point the real work may begin, which is to open and tune one's consciousness to the original spark of Eros that is the evolutionary impulse which lies hidden within the human spirit and which undergirds the creative evolutionary flow of the entire cosmos. Here we are reminded most vividly of Thomas Berry's "spontaneities within us, spontaneities that come from an abyss of energy and a capacity for intelligible order of which we have only the faintest glimmer in our consciousness awareness"⁵.

Thus in Evolutionary Enlightenment, the practice of assuming no relationship to the content of consciousness not only aligns one with the inherent freedom of the empty ground of being, but more important, makes space for the limitless creative potential of the evolutionary impulse to reveal itself. It forges the emotional conviction that real change is possible, and generates a renewed faith in the capacity to evolve⁶.

This is the beginning of the true evolutionary spiritual life. Exactly how the evolutionary impulse will play out in one's own life is impossible to predict. However it speaks, it must be understood as a kind of destiny, a calling, that one is prepared to accept and follow only if one has a clean slate, without personal agendas to overwrite the pure creative impulse. There is not a predestined pathway for this evolution, as it is the original creative urge itself. One can only prepare to act on it by cleansing and dedicating oneself to the evolutionary impulse, to Eros itself.

Unlike Sri Aurobindo and the Mother's yoga, this path does not carry a mythic resonance, but is a natural development in a contemporary multi-perspectival understanding of the cosmos. It does not posit gods or goddesses; it does not direct growth into ancient and well-established pathways. It does not yearn, in Albert Camus's words, with an irrational "nostalgia" for a lost unity, for absolutes, for a definite order and meaning⁷. It is the very living edge of Eros itself, expressed and playing through the human spirit. ☉

¹ Zindell, D. (1998): 734.

² The actual expression of these structures differs from one culture to another, but the basic pattern seems almost universal. While Gebser's scholarship dealt mostly with the West, these structures are also apparent in cultures throughout the world. Much has been written about them by Jean Gebser, Wilber, Georg Feuerstein, and others including myself.

³ Based on a number of anthropological accounts, including Robert Lowie's (1983), *The Crow Indians*.

⁴ In the *Iliad*, Homer refers to Hermes as the friendliest of gods to humans, "for you beyond all others it is dearest to be

man's companion." *The Iliad*. (2000). (Trans. Richard Lattimore), University of Exeter Press: 334-335.

⁵ Jehovah was not a sky god in a literal sense, but recall that Moses had to climb Mt. Sinai to communicate with Him.

⁶ Calasso, R. (1994). *The marriage of Cadmus and Harmony*. (New York: Vintage).

⁷ So-called because of their commitment to Kant's notion that we cannot know the cosmos directly, but only through the mechanisms of our own mind.

⁸ Schelling, F.W.J. *Philosophical investigations into the essence of human freedom*: 66.

⁹ Houlgate, S. (ed.). (1998). *The Hegel reader*: 50.

¹⁰ The idea that species change over time was certainly not new in Darwin's day. As early as the first decades of the 19th century the French naturalist Georges Cuvier was establishing the field of paleontology based on comparisons of fossil records with modern animals.

¹¹ *The Problem of Rebirth*: 58. Originally published in 1915, *Arya*, 2. [Original source unnamed.]

¹² Dawkins, R. (1986). *The blind watchmaker: Why the evidence of evolution reveals a universe without design*. (New York: W.W. Norton).

¹³ During the last quarter of the 20th century an alternative line of evolutionary thought grew out of theoretical studies of thermodynamics and the mathematics of complexity. In 1977 the Belgian chemist Ilya Prigogine received the Nobel prize for his work on energy systems that are "far from equilibrium." In plain English, he showed that complex systems, ranging from ecologies to living organisms, organize their own energy both to sustain and to re-create themselves from moment to moment. (A process known as autopoiesis.) Theoretical biologists such as Francisco Varela and Humberto Maturana, and more recently complexity theorists such as Stuart Kauffman, have added a new branch to evolutionary biology by viewing the genome not so much as a blueprint of highly specific instructions, as the no-Darwinists claim, but more like a roadmap that leads to a particular landscape where development will unfold according to the local conditions found there. Steve McIntosh has recently developed these ideas in a very broad integral framework that includes social as well as biological evolution.

¹⁴ At the Wright Center for Science Education, Tufts University.

¹⁵ Chaisson, E. *Epic of evolution: Seven ages of the cosmos*. Also see www.cfa.harvard.edu/~ejchaisson/cosmic_evolution/docs/splash.html

¹⁶ Schumacher E.F. (1975). *Small is beautiful: Economics as if people mattered*.

¹⁷ For an excellent review of the debates on evolution during this whole period see Louis Menand's (2002) *The Metaphysical Club: A Story of Ideas in America*.

¹⁸ See Combs, A. (ed.). (2010). *Special issue of Journal of Consciousness Studies: A Victorian's Guide to Consciousness*.

¹⁹ A phrase Gebser used to describe a kind of down to earth mystical illumination not unlike Zen kensho.

²⁰ We could also add many other candidates to this list, but the point of this essay is not to catalog possible contenders for integral consciousness.

²¹ Here we might recall Thomas Hobbes' famous line from *Leviathan*, that the natural condition of mankind is "solitary, poor, nasty, brutish, and short."

²² The idea that European culture and especially those most successful in it must be of evolutionary superiority.

²³ All this is discussed in much more detail in my book, *The Radiance of Being*.

²⁴ Bergson, (1907/1983). *Creative evolution*. (A. Mitchell, trans.). (Lanham, MD: University Press of America. [Gunter, P.A.Y. (1983). Introduction to the UPA edition: xvii.]

²⁵ Smuts, J. (1926). *Holism and evolution*: 88.

²⁶ In this regard Teilhard de Chardin followed in the footsteps of Henri Bergson, about whom G. William Barnard writes that his philosophy “[...] affirmed the reality of spiritual forces working in harmony with the unfolding of the physical universe; it emphasized the inherent freedom and dignity of human beings. [It was] [...] a doctrine that was particularly appealing to those who felt alienated from orthodox religiosity, but nonetheless still wanted to discover an underlying connection to larger cosmic realities. Bernard, G.W. (2012). *Living consciousness; The metaphysical vision of Henry Bergson*.

²⁷ Though much, indeed most, of the facts of quantum weirdness were already well known by the mid 20th century, it was not until the 1960s, and especially the 1970s, that positivism had weakened to the point that people began to explore the meaning of many of these ideas beyond the positivistic interpretation that they only represent meter readings and the like; and cannot be discussed further. Needless to say, consciousness itself fell under the same pall.

²⁸ Berry, T. (1999, 2006); Swimme, B., & Berry, T. (1994).

²⁹ Teilhard de Chardin, *The Heart of Matter*: 25.

³⁰ Michael Colebrook's description of Thomas Berry's essential thought. [Retrieved from <http://www.greenspirit.org.uk/resources/TBerry.shtml>].

³¹ *The Dream of the Earth*: 195.

³² *Idem*: 23.

³³ Wilber, 2006. Also see Combs, 2009.

³⁴ Sri Aurobindo himself wrote, “[...] those who get beyond the average, have in one way or other, or at least at certain times and for certain purposes, to separate the two parts of the mind, the active part, which is a factory of thoughts and the quiet masterful part which is at once a Witness and a Will, observing them, judging, rejecting, eliminating, accepting, ordering corrections and changes, the Master in the House of Mind.”

Aurobindo. (1972). *On Himself*. (Pondicherry, India: All India Press): 83.

³⁵ *The Dream of the Earth*: 195.

³⁶ *Evolutionary Enlightenment*: 109.

³⁷ Lane, B. (1996). *The absurd hero*. [Retrieved from <http://www.levity.com/corduroy/camusabs.htm>].

REFERENCES

- AUROBINDO (1952). *The problem of rebirth*. (Pondicherry, India: Sri Aurobindo Ashram Press).
- . (1972). *The synthesis of yoga*. (Pondicherry, India: All India Press).
- BERNARD, G.W. (2012). *Living consciousness; The metaphysical vision of Henry Bergson*. (Albany, New York: SUNY Press).
- BERGSON, H. (1907/1983). *Creative evolution*. (A. Mitchell, trans.). (Lanham, MD: University Press of America).
- BERRY, T. (1999). *The Great work: The way into our future*. (New York: Bell Tower).
- . (2006). *Dream of the earth*. (Washington, DC: Sierra Club Books).
- BROWN, N.O. (1969). *Hermes the thief*. (New York: Vintage Books).
- CALASSO, R. (1994). *The marriage of Cadmus and Harmony*. (New York: Vintage).
- CHAISSON, E.J. (2007). *Epic of evolution: Seven stages of the cosmos*. (New York: Columbia University Press).
- COMBS, A. (2002). *The Radiance of being: Understanding the grand integral vision; Living the integral life*. (St Paul, MN: Paragon House).
- . (2009). *Consciousness explained better: Towards an integral understanding of the multifaceted nature of consciousness*. (St Paul, MN: Paragon House).
- (ed.). (1910). *Special issue of Journal of Consciousness Studies: A Victorian's guide to consciousness*, 17 (11-2).
- FEUERSTEIN, G. (1987). *Structures of consciousness: The genius of Jean Gebser*. (Lower Lake, California: Integral Publishing).
- GEBSER, J. (1949/1986). *The ever-present Origin*. (N. Barstad and A. Mickunas, trans.). (Athens, Ohio: Ohio UP).
- HEGEL, G.W.F (1807). *The phenomenology of mind*, (J. B. Baillie trans., 1910; 2nd ed. 1931).
- HOULGATE, S. (ed.). (1998). *The Hegel reader*. (Oxford: Blackwell).
- LASZLO, E., & COMBS, A. (2011). *Dreamer of the Earth: The relevance of Thomas Berry, prophetic visionary (1914-2009). Selected essays*. (Rochester, Vermont: Inner Traditions).
- LATTIMORE, R. (trans.). (2000). *The Iliad*. (Exeter: University of Exeter Press).
- LOWIE, R.H. (1983). *The Crow Indians*. (Lincoln, Nebraska: University of Nebraska Press).
- MCINTOSH, S. (2012). *Evolution's purpose: An integral interpretation of the scientific story of our origins*. (New York: Select Books).
- MENAND, L. (2002). *The metaphysical club: A story of ideas in America*. (New York: Farrar, Straus and Giroux).
- SCHELLING, F.W.J. (1809/2006). *Philosophical investigations into the essence of human freedom* (Jeff Love trans.). (Albany, New York: SUNY Press).
- SCHUMACHER E.F. (1975). *Small is Beautiful: Economics as if People Mattered*. (London: Blond & Briggs).
- SMUTS, J. (1926). *Holism and Evolution*. (London: Macmillan).
- SWIMME, B., & BERRY, T. (1994). *The Universe Story*. (New York: HarperOne).
- TEILHARD DE CHARDIN, P. (1959/1961). *The phenomenon of Man*. (New York, Harper & Row).
- . (1978). *The Heart of Matter* (Hauge, trans.). (London: Collins).
- WILBER, K. (2006). *Integral spirituality*. (Boston: Shambhala).
- . (2007). *Up from Eden: A Transpersonal View of Human Evolution*. (Wheaton, IL: Quest).
- ZINDELL, D. (1998). *War in Heaven; Book Three of a Requiem for Homo Sapiens*. (London: HarperCollins).



CLEARING TO HOLOSENTIENCE AND LEVEL II ENLIGHTENMENT

J E F F R E Y E I S E N



Dr Jeffrey Eisen, PhD, is an enlightenment therapist, teacher, and author. Trained as a psychotherapist, he has gone far beyond that to create PsychoNoetics, a system of holosentient thinking, intentional clearing and evolution. In his books and in dozens of online essays, he has explored nonduality, the nature of illusory reality, and recently, the socioeconomic forces that condition our consciousness. Dr Eisen practices and teaches PsychoNoetics locally in his South Florida office, and globally through the Internet. Website: <http://drjeffisen.com>; email: drjeisen@psycho-noetics.com.

THE EXPERIENCE OF HOLOSENTIENCE

MOST PEOPLE, MOST OF THE TIME, EXPERIENCE the world as a succession of unrelated things... parts of a vast machine that when completely known and put together, will, in some indeterminate future, finally explain how reality works. This is the old paradigm, but it is also the paradigm most of the world is still stuck in, and probably will be for the foreseeable future.

But there is a new paradigm of perception that is developing, a holographic paradigm of perception that accompanies some forms of enlightenment. In this paradigm things are not seen as separate and separated parts of a vast machine, but instead are seen holographically, as samples of the big picture or pattern. Perhaps the perception lacks detail in many areas, like a blurry photograph or a line drawing that suggests more than it specifies, but still it is a complete rendition of the whole.

The roots of this holographic perception go back thousands of years to the ancient sages of the religious traditions and the shamans of the tribal cultures of the world. But it is only relatively recently, that holograms have entered western consciousness as a technology and popular metaphor for reality, including brain and body function, and even 'paranormal' phenomena¹. The idea of holographic perception borrows this metaphor to suggest that

human beings are naturally endowed with the capacity to perceive wholeness, and that their subjective experience of perception can grow in this direction. Borrowing from the science as well, holographic perception could be described as a kind of 'seeing through' the functions of the brain that convert frequency patterns into a 3-dimensional world.

A more accurate word for holographic perception would be holosentience. *Holosentience is holographic awareness.* Possessed of it, we are aware of every no-thing, not as isolated words or images, but as systems – systems within systems making bigger and bigger systems. The whole system is, of course, well beyond human understanding. It is an asymptote, more and more closely approached, but never quite reached.

Just as a hologram is an interference pattern between two beams of laser light, holosentience is an interference pattern between the reference *laser consciousness* of the enlightened individual, and the implicit consciousness of that which is being perceived. (Laser consciousness is my term for the condition of coherence that arises when all internal conflicts are resolved, and the "photons" of the mind, like the electrons in a magnet, come into polar alignment.)

FROM ONENESS PERCEIVED TO ONENESS PERCEIVING

During the 1990s I spent much time answering the question, "What is duality?" The answer and a book's worth of exploration around the answer was, "Duality is Oneness perceived²." The act of perceiving divides the fabric of consciousness into two parts, into 'ducca' or twoness. And our many ways of measuring three dimensional reality can all be seen as relative to a point of perception, one that divides the world into hotter and colder, greater and lesser, faster and slower, etc.

But even as I was understanding nonduality from this perspective, I was being offered a set of experiences that were to take me into a new way of seeing, a holosentient perception. In dealing with my incessant allergies, I first was treated and then became a practitioner of the Nambudripad Allergy Elimination Technique (NAET). As I came to manage my allergies, it became clear that I was evolving the technique into a powerful modality in my own field of psychotherapy, a letting go of egoic contractions through the power

of intention³ (part of the body of work I now call PsychoNoetics⁴).

Clearing through intention is an evolved capacity. It is a process of clearing duality from Oneness. It is also a practice of living simultaneously in nonduality and duality, and in integrating these two aspects into One. From this place, perception is no longer either dual or nondual, but both, that is – holosentient. *Holosentience, then, is Oneness perceiving duality, but not getting caught in it.*

Because clearing through intention eventually confers relative freedom from egoic contractions, integrates duality and nonduality, and creates a sustainable state of enlightenment and holosentience, I often refer to this wholeness as Level II Enlightenment. All of evolutionary history can be seen as antecedent to this process, where the human brain is able to clean up what is not working in human evolution, and actually shift direction.

THE EXPERIENCE OF LEVEL II ENLIGHTENMENT

What is the experience of Level II Enlightenment? Some of what follows is well known from different enlightenment traditions, but it is the wholeness it points to that reveals the subtle shift. I am going to begin my answer with the experience that began to shift my own paradigm of perception and thinking.

When I was younger, I was very involved in the martial arts, particularly the internal martial arts of Aikido and Tai Chi Chuan. I remember my Aikido instructor telling me that the three components of Ki are weight underside (a sense of heaviness or profound relaxation), the unbendable elbow (i.e., gotten by projecting your mind, through your arm, into the distance), and sinking your mind into the one point (located at the midpoint between the crest of your hips, about 2 inches behind your naval). However, and this is really the ‘one point,’ when we have one of them, we have them all; whereas if we lack one of them, we lack them all!

At the time I didn’t understand this. I was still caught in the old paradigm way of perceiving things as separate. But many years later, this has come to make perfect sense. I see these three separate things are not separate at all; they are different aspects of the same no-thing, that underlying reality that the act of perception divides into things.

This same principle applies to the many facets of enlightenment. They appear or are variously called understanding, awakening, openness, nonduality, empty or Still Mind, the Ground of Being, Oneness, unity consciousness, God, Christ consciousness, love, the list goes on and on. The point, however, is that enlightenment itself is a ‘no-thing’, a unity, to which all of these facets and terms are just

pointers. What is more, just like Ki, if we have one, we have them all; whereas, if we lack one, we lack them all. Level II Enlightenment, then, entails a holographic experience; it entails abiding in the perceptual paradigm of holosentience.

That said, however, just as there are three aspects of Ki deemed to be essential, I am going to present three aspects of enlightenment that I deem to be essential. They are: 1) seeing through the illusion of separate identity, 2) Still Mind, and 3) the figure-ground reversal. And just as in Ki, when we have one of them, we have all of them, and when we lack one of them, we lack all of them. The three separate things are not separate at all; they are different aspects of the same no-thing, that underlying reality that the act of perception divides into things.

But I would like to make an addition to these three pointers, one actually closely related to Aikido, Tai Chi Chuan, Qigong or any of the other inner energy practices. And that is the positive or negative direction of our internal energy, whether we call it Ki, Chi, life force or any other name. I call it *flowing versus grasping*. This too is an aspect of Level II Enlightenment.

THE MANY FACETS OF LEVEL II ENLIGHTENMENT

SEEING THROUGH THE ILLUSION OF SEPARATE IDENTITY

The *illusion* of being a separate entity is perhaps the most imprisoning of all illusions. It builds upon associations of the underlying illusions that we are our bodies, our appearance, our gender, our emotions, our thoughts, our beliefs, our socioeconomic class, or even our personal history. All of the available evidence supports the experience of separation, the belief that we are, in fact, completely separated from one another. However, as many of us know, this belief is mistaken. In nondual reality we are separate centres of the One, i.e., separated in body, but connected in consciousness.

Because the experience of separate identity is supported by all the evidence of sensory experience, we will never, as long as we are embodied, fully feel connected. We will always have a lingering experience of ourselves as separate beings. This is unavoidable, however, and this is the point – we do not have to let perception go into conception. We can feel that we are separate without believing it. We can have all the sensory perceptions and the accompanying emotions without assuming the belief and without letting the belief rule our actions. We have to transcend the belief while still abiding in the illusion. In fact, leaving the illusion intact is not

only unavoidable, it is necessary, because the experience of separation is essential to surviving in ordinary reality.

TRANSCENDING THE IN-SELF AND THE OUT-SELF DISTINCTION

Following the thread of separate identity, leads us to a subset of the illusion of separation, and that is the *in-self* and the *out-self* distinction. Self-other or in-group out-group separations are as old as life itself. Primates have them, birds have them, lizards have them, bacterial colonies have them, perhaps even plants can be said to have them. And, of course, you and I have them.

The in-group is treated one way, with acceptance, consideration and love. The out-group is treated another way; it is defended against, battled, even preyed upon and eaten. It is said that the only way that humanity is ever going to be fully unified is if it is attacked by aliens from outer space. Barring that unlikely circumstance, all of these distinctions between the in-group and the out-group persist, although changing from one moment to the next as circumstances change. Thus, families constitute an in-group, but siblings fight, one constituting an out-group to the other. Sport teams constitute an in-group, one competing against the other; but during practice all sorts of individual rivalries arise. Nations are all out-groups to one another, except when alliances of nations become in-groups. However, within nations and alliances, competition is always present, political, religious, moral, economic, individual and so on.

What does this have to do with transcending the illusion of the individual separated self? All of these changing distinctions within distinctions are just extensions of the illusion of the separate self; thus, the in-group out-group distinction is better termed the *in-self out-self distinction*. Within the illusion of the separate self, the boundaries of the 'self' are flexible, always contracting and expanding as circumstances change.

When we transcend the illusion of the separated self, we morph into the *extended* Self and then into the One Self. The in-self and the out-self distinction is erased, and instead, there is the *one, expanded Self that encompasses all of creation*. Of course, there always remains a vestigial in-self and out-self, but it is shallow, un compelling and easily transcended and dispensed with.

FROM STILL MIND - TO STILL MIND

This brings us to Still Mind. Unless we are in Still Mind, all of these distinctions of self and other continue to be present for us. It is as simple as this. Every facet of enlightenment – unity, truth, awakening, God consciousness, nonduality, cosmic consciousness, etc., everything that we have ever experienced as enlightened or even heard about – arises with our entrance into Still Mind and subsides again when we leave it. Still Mind is the main portal to universal consciousness.

We become our small, individual selves through mental activity, whether conscious or unconscious, intentional or unintentional, it doesn't matter. When we start thinking, intending, believing, denying, attaching, remembering, perceiving, etc., we do it as an ego. As such we start contracting, and what we contract into is a separated self; whereas when we re-enter Still Mind, we return to unity, the unity of universal consciousness. As I said, it's as simple as this.

Still Mind has to become the ground of our being.

It is relatively easy to get into Still Mind. In fact, many forms of meditation will do it; it is another story entirely to stay there. The ego, with its present and past life load of reactions, temptations, distractions, emotional upsets and other contractions usually jars us out of Still Mind as soon as we return to ordinary life. The conversation between nonduality and duality that can direct human evolution depends on Still Mind.

THE FIGURE – GROUND REVERSAL

Clearly, we must become aware of the state in which we rest and out of which we operate⁵. Where do we rest? Do we rest in our ego, or do we rest in the Ground of Being itself, Oneness, universal consciousness, Self or whatever you want to call it?

Resting in Oneness and perceiving from it, is one of the hallmarks of enlightenment as traditionally taught and transmitted. However, for most people, even some who consider themselves enlightened, the ground of their being is still their ego. Oneness, like God, is a figure on that ground, just an idea, to be grasped at, or at best experienced occasionally and always as a thing outside of themselves, perhaps to be remembered and cherished, but never realized as *essential identity*⁶.

So we can ask ourselves, is Oneness an idea, a figure on the ground of my ego, or is Oneness the ground of my being, with all of the varied contents of the ego, figures upon it?

How do we achieve this figure-ground shift? There are many ways. We can get there by going to Still Mind. We can get there by transcending the illusion of separate identity. Or we can get there by gradually *letting go* of the contents of our egos until we begin to shift - and then stabilizing in that shift, which is an *essential* aspect of Level II Enlightenment. We can get there through these ways and many more. But like the three essential aspects of Ki, the many aspects of Level II Enlightenment form a holographic experience; when we have one of them, we have them all; when we lack any one of them, we lack them all.

FROM GRASPING TO FLOWING

Lest my choice of three essential features leads anyone to see Level II Enlightenment as merely a mental

state, I want to point out an energetic/feeling aspect as well, an enduring quality of positive energy. Have you ever observed that some people, no matter what the circumstances, seem to be always radiating their energy outwards, as if flowing from some inexhaustible inner source, while others seem to be always needy, sucking your energy and channelling it into an unfillable hole? Still others are simply collapsed, dead inside, their energy neither flowing nor grasping - just stagnant.

Also, have you ever noticed how in the flowing mode people are *radiant*, with shining eyes, and we are relaxed and at ease in their presence? By contrast, people in the grasping mode seem *overbright*; they are always on, overreager, even voracious, as if they are wanting something from you, or sucking the love out of you - which, of course, they are. And people who are collapsed, their energy static, they look - well - lifeless, grey!

What we are seeing is variation in a polarity or direction of energy, from positive to negative, from flowing out to reversing and going inwards. There is also an aspect of strength or velocity in either direction as well, while the zero point between the flowing-grasping switch is the stagnant energy of people who have just given up!

Most people are habitually in one mode or the other, although many of us also switch from one mode to the other frequently, as our outer circumstances and/or our inner state changes. Some of us who are sensitive to energy can see the "light" change as people undergo these switches.

This is an important witnessing-observation skill to cultivate because the ego is immensely flexible in its capacity for self-deception. Human beings can take all and any pointers to enlightenment, and convince themselves that they are pretty much there. However, the proof is in the pudding. Unless, our energy is 'flowing', we are hiding aspects of our ego from ourselves under the guise of mental conclusions or emotional qualities. There is more to say about substituting excessive positive emotion for 'flow', but hopefully I have already pointed toward the precision of Being that is Level II Enlightenment.

APPROACHING LEVEL II ENLIGHTENMENT THROUGH INTENTIONAL CLEARING

The observations above are pointers to a holosentient pattern. In this pattern we see the overall tendency of the mind to construct categories about everything, including self and God, and then to operate out of those categories (aka, egoic conclusions). We see then that Still Mind is a portal to a different process. "How does Still Mind relate to egoic conclusions?" we might ask of the whole pattern.

The answer is the practice of intentional clearing, the essential process of PsychoNoetics, and the path of letting go that I have been both developing and living into for the last twenty years or so. Working from Still Mind, even from the *witnessing* which approximates Still Mind, it is possible to let go of egoic contractions⁷, and thus gradually let go of our tendencies toward separateness. Intentional clearing, then, becomes a portal to a stable, holosentient, Level II Enlightenment.

It is a fundamental tenet of PsychoNoetics that, just as we created our egoic patterns of contraction, we can uncreate them.

HOW DO WE RELEASE AND CLEAR EGOIC CONTRACTIONS?

We release egoic contractions from Still Mind, through the power of our intention, so that we eventually become whole, not whole again, but whole for the first time in our present lives.

Recognizing egoic contractions and clearing them is a skill set that has to be acquired. There are two, related ways to *see* the contractions that take us out of the *right place*. One is the witness meditation; the other is monitoring. In the witness meditation we go to Still Mind, and from there witness our memories, emotions, reactions, and what have you. When we have mastered the witness so that it becomes second nature, we can start monitoring. In monitoring, witnessing has become automatic, a way of life. We just sense when we're not in the right place.

We may also use some signposts that indicate when we are in an egoic contraction. Things don't go well! Our positive flow of energy becomes negative, we feel disturbed and arguments sometimes erupt. Being alert to these and similar conditions can begin to move us toward witnessing them in meditation or monitoring them in ordinary states; in both instances we are building our ability to step outside of the contraction and *see* it.

Once we have become aware of a contracted place in ourselves, the next step is to identify the causes of the contraction... *precisely*. This precise identification is a necessary preamble to effective clearing with intention. Whether in self therapy or in a session with a PsychoNoetic facilitator, specificity is needed to facilitate permanent clearing.

To precisely identify contractions, I use autokinesiology (muscle testing myself), but others use traditional psychotherapy, or develop their own precision techniques. My core practice has been to address the contraction directly, and then to muscle test for contraction etiologies, such as present and past life memories, attachments, emotions, beliefs, false identities, being stuck in time, and many more.

Once a contraction has been noticed and identified, clearing it is as simple as intending to do so. By forming the intention, and perhaps articulating it, either out loud or in the mind, the clearing takes place. Again, we can either do it ourselves, or in a session with a PsychoNoetics facilitator.

But, we can only clear if we can access Still Mind. Still Mind *is* the portal to Oneness, and only from Still Mind and Oneness can we effectively let go of what we're holding. If we are lost in our "thoughts", we cannot do anything. We simply don't have a place to stand, and without that we have no leverage.

Archimedes said, "Give me a long enough lever and a place to stand, and I will move the earth!"

Still Mind is the place to stand!

But there is a bit of a balancing act to the process. If we cannot still our minds, we can't clear. On the other hand, if we're only in Still Mind, contractions can disappear, then reappear when we fall out of it. On the face of it, this is an insoluble double-bind. However, in reality it's not so much of a problem as it seems. One gradually progresses towards the ability to be present in Still Mind while holding the contraction in view. The witness meditation is extremely useful in this regard.

In a way clearing is like anything else we do, walking or picking up a pencil. We just intend it, and it happens. The most difficult and essential part is not clearing; it is resting in the place of Still Mind, that universal consciousness from which our intention is potentiated. Though all of the various "spiritual" paths are more or less effective in attaining and holding Still Mind, the addition of intentional clearing to any and all of them will accelerate our spiritual evolution to warp speed. This is the essence of Level II Enlightenment.

And the important thing is not how we clear, but that we clear.

HOLOSENTIENCE...
A NEW WAY OF THINKING
FOR A NEW CULTURE

There is something that happens when we have cleared 'enough' and spend more and more of our daily lives in Oneness, responding appropriately to what comes up, focusing where focusing is needed, doing when doing is needed, and then, when everything that needs to be done is done, returning to Oneness. There is no longer any need to be constantly in a meditative state. There is no longer any need to maintain the conditions that sustain you in peace and harmony. You return to the state naturally, just as when the wind stops, the water calms. This is living in nonduality and duality simultaneously, and living there creates the holosentient place from which we become

aware not of things, but of patterns of things, patterns fractally arranged to make up an infinite and ultimately unknowable cosmic pattern.

There is one more aspect of Level II Enlightenment and the holosentience that comes with it, one that I would like to emphasize. It is perhaps the most important aspect of all. Holosentience greatly enhances our ability to *recognize truth*. I don't mean factual truth; I mean real truth, the truth of what people are, the truth in statements and theories of reality including, of course, the truth in enlightenment itself. In other words, we come to recognize the truth that underlies all illusion. When we are holosentient the world becomes transparent, and we understand whatever we look at more or less effortlessly.

Recently, for example, I turned to look at the socioeconomic system that imprisons us in a particular kind of illusion. That, in turn, led me to the problem of how to refocus *corporate consciousness* in a way that would shift global consciousness. After a few days of considering the problem, I arrived at the following insight:


Redefining profit (as whole system profit)

The problem is not that corporations operate for a profit; it is that *the present economic system, not reality, defines this profit*. Another way of saying this is *that the corporation makes the profit, not humanity and the global ecology [...]* At this time in history, a corporation can destroy an ecosystem, pollute a river and impoverish an indigenous culture, but if it makes a monetary profit, if it costs less to destroy part of the world than the earnings such destruction engenders, the corporation is deemed profitable — and the investors realize a comfortable return on their investments [...]. That is not a profitable corporation but a subsidized one, one that, in whole systems terms, operates at a substantial loss. By whom is it subsidized? By the countries that house it, by the ecosystem of the globe, by you and I, and by every person that walks or will walk the earth.

It is clear that we have to build accountability and responsibility into the corporate mind. But the question is how to do this? I believe the most realistic answer starts with *redefining profitability itself*; in other words making it profitable for the corporation to contribute to the *humansphere* and unprofitable for it to consume without at least recycling and restoring. The only way to do this is to *make corporations accountable for the real costs of their doing business*⁸.

With the complexity of global survival before us, how can we possibly know what any action will put into motion? It seems imperative to shift into holosentience, in order to access right choices now. And intentional clearing as a daily practice, like brushing our teeth, is sorely needed to facilitate that shift.

One final, holosentient thought... What we most need now is for the new shoots of holistic awareness that are appearing everywhere to coalesce into an educational system conceived in the spirit of Universitas, i.e., going towards the One, rather than the conventional universities which separate fields of knowledge into smaller and smaller specialties. We don't only need it at the university level; in fact, by the time students begin their university education, it is too late. We need it at the high school level, elementary school and perhaps, even preschool levels. In order to shift toward a holosentient society, we need to create learning contexts for holosentient youths, and for that we need holosentient parents, teachers, facilitators and learning systems.

Holosentience can be seen as the hallmark of quantum physics, ecology, permaculture, holistic medicine and all of the other visions of pattern, interconnection and unity that characterize the cutting edge of the new culture. Furthermore, it serves as a marker for the cognitive and intuitive processes that characterize individuals and groups reaching to find new solutions to old problems, solutions that benefit the whole system and unify that which was previously thought to be separate. To move our young people forward toward holosentience and the Level II Enlightenment on which it rests, is the next step toward transforming the global culture. 

- (2011). *Where do you rest?* (Essay at www.drjefffeisen.com/2011/11/13/where-do-we-rest).
- (2011). *The Omnium Manifesto*. (Essay at <http://drjefffeisen.com>).
- PRIBRAM, K. (1977). *Languages of the Brain*. (Monterey, CA: Wadsworth).
- (2007). *The Holographic Brain*. (DVD: Think ing Allowed Productions).
- TALBOT, M. (1991, 2011). *The Holographic Universe*. (New York: HarperCollins).
- WILBER, K. (ed.) (1982). *The Holographic Paradigm*. (Boulder, CO: New Science Library).



¹ Pribram 1977, *Languages of the Brain*; 2007, *The Holographic Brain*. Bohm 1980, *Wholeness and the Implicate Order*. Wilber 1982, *Holographic Paradigm*. Talbot 1991, 2011, *The Holographic Universe*.

² Eisen 2003, *Oneness Perceived*.

³ Eisen 2006, *Playing 20 Questions with God*.

⁴ www.psychonoetics.com.

⁵ Eisen 2011, *Where do you rest?*

⁶ This is perhaps the edge of the enlightenment process for many on the spiritual path today. It is testimony to the creative power of the mind, that even enlightened experiences can be co-opted and become egoic spiritual identities, a final barrier to attaining the new habit of resting in Oneness as the Ground of Being.

⁷ 'Egoic contractions' are all of those memories, beliefs, attachments, and intentions that focus our consciousness into partial awareness.

⁸ Eisen 2011, *The Omnium Manifesto*.

REFERENCES

- BOHM, D. (1980). *Wholeness and the Implicate Order*. (London: Routledge & Kegan Paul).
- EISEN, J.S. (2003). *Oneness Perceived. A Window into Enlightenment*. (St. Paul, MN: Paragon House).
- (2006). *Playing 20 Questions with God. A Cosmic Self-Repair Manual*. (Airleaf Publishing).

CONSCIOUSNESS, KNOWLEDGE AND THE FUTURE OF HUMANITY.

A SHORT OVERVIEW BASED ON THE WORK OF SRI AUROBINDO

R . M . MATTHIJS CORNELISSEN



Matthijs Cornelissen is a Dutch physician who has been living in India since 1976. He teaches Integral Psychology at the Sri Aurobindo International Centre of Education in Pondicherry and is the founding director of the Indian Psychology Institute.

sense-based knowledge of the world around us, and our present civilization is built entirely on the objective knowledge it provides. In our public life we ignore the other three – knowledge by identity, experiential knowledge, and introspection – and we look down on their inherent subjectivity.

In this essay I offer a short description of how the Indian tradition has managed to perfect the three types of inner knowledge, and suggest that they are needed to ensure a safe and fulfilling future for humanity.

INTRODUCTION

TRUTH, LOVE, JOY, BEAUTY, MEANING, AND VIRTUALLY everything else that really matters in life exists only in consciousness and is fundamentally subjective. And yet, science, as the dominant knowledge system of our proud and powerful global civilization is surprisingly poor in its understanding of consciousness and has failed to develop effective methods to study the subjective domain. As a result education, economics, and many other aspects of our collective life are based on serious misconceptions about human nature and goad us on to live in total disregard of the beautiful planet on which we live.

The first half of this essay compares the mainstream physicalist concept of consciousness with two more comprehensive ways of conceptualising consciousness that have their origin in the Indian tradition. The second half discusses the avenues these two Indian theories offer for the development of the rigorous system of subjective knowledge our society so desperately needs.

For this miniature overview of consciousness and knowledge I base myself on the work of Sri Aurobindo, who distinguishes in our ordinary waking consciousness four different types of knowledge. Of these four, science has perfected only one, the

THREE CONCEPTS OF CONSCIOUSNESS

There is very little consensus in the field of Consciousness Studies. It looks as if every major author in the field has his very own, unique idea of what consciousness actually is. If one takes the academically somewhat dangerous step of ignoring the fine details, it appears that one could group these different conceptualisations of consciousness fruitfully into three major clusters, physicalism, purity, and integrality¹ (FIGURE 1).

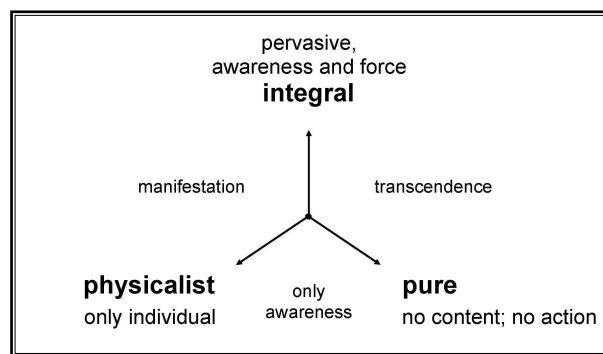


FIG. 1 - Three concepts of consciousness. [Author].

This simple division into three major conceptual clusters may not do justice to all the subtle arguments with which the many disputants in the field differentiate their positions from each other, but it may help to clarify the basic lay of the land. There is no claim that the often finely nuanced positions

of individual authors will always fit exactly under one of these three labels. The only suggestion made is that most theories would find a fairly well-defined place somewhere in the conceptual space created by these three positions.

PHYSICALISM. The first of the three, “physicalism”, is hardly found in the Indian tradition, but might

well claim to be mainstream in the field of Consciousness Studies. It holds that the world is basically physical, and that consciousness *emerges* out of the complexity of the neuro-physiological processes that take place in the brain. Consciousness, in this scheme, is thus an exceedingly rare exception in an otherwise unconscious universe: It is limited to humans, plus, at most, some other animal species and perhaps, in the long run, robots. As it is fully dependent on a working brain it is moreover intrinsically a quality or faculty of one individual. As the physical world is supposed to be causally closed, and as consciousness in this view is only a subjective phenomenon, most people in this camp hold that consciousness must be without causal effectiveness: In the language of Consciousness Studies, consciousness is considered to be *epiphenomenal*.

PURE CONSCIOUSNESS. The second position, “pure consciousness”, could be considered mainstream in contemporary Indian philosophy. It seems to have arisen from a yogic experience in which one separates from one’s consciousness all content and movement; or to say it differently, in which one relocates the border between one’s observing self and observed nature further and further inwards till all movements of the mind are on the side of nature, that is, on the outside of one’s self. What is left on the side of the self is then a “pure” consciousness, without content, structure or movement. Different schools have given this state of pure consciousness (or of pure being) different names – for example *śuddha*, pure, and *kaivalya*, sole or absolute – and conceive it in slightly different ways. According to Sāṃkhya this is the consciousness of the *puruṣa*. According to Vedānta this is the consciousness of the pure witness, *sākṣī*, though here it is sometimes argued that ultimately even the little, formless “identity” of the still incarnate and time-bound *sākṣī* has to be dropped in favour of the immutable, transcendent *atman*. In Buddhism, the doctrine of *anatta* (non-self) denies the very need for a carrier, a “self”: the pure consciousness just flows.

There are two points in which the pure consciousness view is similar to the physicalist position. The first is that both see consciousness only as a completely passive awareness. The second is that they both see all mental processes as part of Nature, which they conceptualise as in itself mechanical and unconscious. But here is where the similarity ends: in most other aspects the pure consciousness view is an almost exact mirror-image of the physicalist position². While physicalists see matter as the original, and often even as the only “really real reality”,

adherents to the pure consciousness view see a silent transcendent consciousness as the original, and often even as the only “really real reality”. While the physicalists acknowledge consciousness at most as the product of individual physical brains, Advaita (non-dual) adherents of pure consciousness see the entire manifestation at most as an imposition (*adhyasa*, *adhyāropa*) on the pure consciousness of Brahman. Interestingly, there are similar degrees of exclusivity in both views: In the physicalist camp there are some (like Patricia Churchland)³ who claim that consciousness consists of *nothing but* physical processes, while there are others (e.g. John R. Searle)⁴ who acknowledge that consciousness is something more, even though they still see that “more” as only epiphenomenal. Similarly in the pure consciousness camp, there are some (the *māyāvādins*) who claim that the manifestation is entirely unreal, while there are others who acknowledge that the manifestation is ultimately part of Brahman, and thus in essence real, even though in appearance illusionary (S.K. Ramachandra Rao).

Various shades of the pure consciousness view were influential in early Buddhism, and later, during the classical period, it became the dominant view in the Sāṃkhya and Advaita Vedānta schools of Indian philosophy. In modern times too, the idea of pure consciousness has received a lot of attention, perhaps mainly under Buddhist influence. This is understandable because it is a fascinating concept, and, though its possibility has been disputed on theoretical grounds (see the discussion between Katz (1978) and Forman (1990)), experientially it seems to be a genuine human possibility. It is, however, not the only way of looking at consciousness in the Indian tradition, and for various reasons not even the most significant.

INTEGRALITY. The third major view of consciousness is the integral perspective, and we find it as early as the *Rg Veda*, the earliest *Upaniṣads*, and the Tantric *āgamas* (scriptures). It holds that *Brahman*, the absolute, ultimate origin of everything in existence, is of the nature of *saccidānanda* (an indissoluble oneness of absolute existence, consciousness, bliss). Amongst these three aspects, consciousness is often stressed, and the word *Brahman* itself is then translated as consciousness in the specific sense of the original, absolute consciousness of the Divine. A famous passage describing the idea that ultimately everything down here is a manifestation of *Brahman*, comes from the *Muṇḍaka Upaniṣad* (1.7-9). It states⁵:

As the spider puts out and gathers in, as herbs spring up upon the earth, as hair of head and body grow from a living man, so here all is born from the Immutable.

In the next *śloka* it describes in more abstract terms the whole process of evolution, right from inanimate matter to the highest spiritual realisation:

Brahman grows by his energy at work, and then from Him is matter born, and out of matter life, and mind, and truth, and the [inner] worlds, and in works⁶ immortality.

Finally, in the last line of this section, it confirms once more that all that exists is made out of the (self-)knowledge of the Divine:

He who is the Omniscient, the all-wise, He whose energy is all made of knowledge, from Him is born this that is Brahman here, this Name and Form and Matter [translation by Sri Aurobindo⁷].

The key characteristic of the integral view of consciousness is thus that it holds that consciousness is not only individual or transcendent, but also pervasive throughout the manifestation, and that it is not only passive but also dynamic: not only *cit* but also *cit-śakti* (consciousness-force). This view of consciousness shares thus with the physicalist view a deep respect for the physical manifestation, but it agrees with the pure consciousness view that consciousness is not only an individual affair, but also, and even primarily, a self-existent transcendent and cosmic reality. It differs, however, from both other views in that it holds that consciousness is dynamic as well as passive and silent.

A HISTORICAL CONTEXT FOR THE INTEGRAL AND PURE CONCEPTS OF CONSCIOUSNESS

As already hinted at, there is a historical aspect to the relation between the integral and the pure conceptualizations of consciousness in the Indian tradition. Over time there seems to have taken place a shift from the more general, integral concept of consciousness that we find in the *R̥g Veda* and early *Upaniṣads* to the narrower “pure” concept of the *darśanas* (schools of philosophical thought)⁸. According to Aurobindo, the ancient, more comprehensive ideal of Truth, Light and Immortality, which is so trenchantly described in the *Bṛhadāraṇyaka* (3.2.13), is gradually overshadowed by a sense of *vairāgya* (dissatisfaction with life). *Māyā*, which in the *R̥g Veda* is still the power of the Divine Mother that measures out the worlds, takes on the meaning of illusion, *mithyā*. The ancient ideal of freedom (*mukti*), which originally has the specific sense of liberation from ignorance, begins to be understood as liberation from life in general (“not to be reborn”). The *via negativa*, the *neti, neti* (neither this, nor that) appears to win from the *so ham* (I’m That).

And yet, especially outside the confines of professional philosophy, both sides remain alive. The *purṇa stotra* (hymn of integrality) remains one of

the most recited prayers. The *Bhagavad Gīta*, in whose synthetic view the impersonal dualism of the Sāṅkhya is accepted as a useful method within an overall framework that is simultaneously non-dual and theistic, remains one of the most influential classical texts. Kāśmīr Śaivism with its life-affirming integrality of *Śiva-Śakti* was never fully eclipsed by Śaṅkara’s otherworldly Advaita Vedānta. Though presently less well-known, its influence is visible throughout India. The Indian culture as a whole follows the practitioners of *yoga*⁹ and continues to look at differences within a wider context of unity.

A COMMON GROUND, WITH IMPORTANT EXTENSIONS

There are two metaphors for consciousness that are commonly found throughout the Indian tradition as well as in contemporary Consciousness Studies. The first is that of consciousness as a light in which the world is seen, and the second is that of consciousness as a stage on which the world-play is enacted. A third, and perhaps more profound way of approaching the question of what consciousness is, can be found in the *Kena Upaniṣads*, which begins by asking who or what it is that knows in the knowing, that sees in the seeing, and that hears in the hearing. The early *Upaniṣads* to which the *Kena* belongs, assume the existence of a cosmic consciousness in their enquiries, and the answer of the *Kena* is accordingly nothing less than Brahman, who could be described as the (impersonal) Self of the universe who created all out of its own consciousness. By giving this answer, the *Kena* affirms one of the most fundamental assertions of the Vedic tradition, namely that our individual conscious being is ultimately one with the conscious being of the universe.

The differences and the similarities with modern views of consciousness now become clear. In the ordinary waking state of ordinary unenlightened humans, consciousness is at the centre of our experiencing, phenomenal existence. To use Nagel’s cute phrase¹⁰, consciousness is that which ensures that “it is something like” to be whatever we happen to be, whether that is Nagel’s bat, a modern human, or the Vedic Brahman. In other words, consciousness is that power which actually “sees” or is aware of the images that are produced by the mind (*buddhi*). According to the physicalist and pure consciousness positions, this power is a passive witness, whether with, or without a (permanent) individualised centre. What the Indian tradition adds to the scientific mainstream view is that consciousness exists also on a cosmic & transcendent scale. The integral view adds then to both that the imaging has also a dynamic

aspect. In other words consciousness (or at least the Self as carrier of the consciousness¹¹) sanctions, supports and ultimately rules the world of name and form it is engaged with: it is not only its witness but also its *īśvara*, or Lord.

CONSCIOUSNESS, SELF,
AND THE PURSUIT OF
RIGOROUS SUBJECTIVITY

The relevance of these rather abstract conceptions of consciousness may not be immediately clear, but a little reflection shows that adherence to one or the other makes a huge difference, not only for our individual understanding and well-being but potentially even for our survival as a species. The area in which this is perhaps the easiest to see is the meaning and aim of life. In the physicalist view there is no place for a soul or eternal self and the universe is seen as empty of consciousness, driven by mechanical laws and chance. In such a scheme the individual may be wired to strive for enjoyment and survival of the species, but as long as consciousness is epiphenomenal, the whole idea of meaning remains an illusion.

In the pure consciousness tradition there are two concepts of self: in the *astika* (orthodox) schools the individual self is one with the silent, transcendent self of the supreme. In the Buddhist tradition there is no self at all. Either way there is no immediately obvious aim to life other than realising that silence. In the Indian tradition one often encounters the three aims of *dharma* (righteousness), *artha* (material ends), and *kāma* (fulfilment of desires), to which later *mokṣa* (freedom of the self from all these pursuits) got added. When pure consciousness is postulated as the ultimate reality of both the individual and the cosmos, then the

first three can only be accepted as a concession to our collective ignorance and only the last makes intrinsic sense.

In the integral view the situation is different. When the entire cosmos is a still evolving manifestation of the Divine consciousness, then the imperfection and suffering we now see need not be inevitable characteristics of creation. There arises then at least the possibility of a perfect, divine manifestation in the future (Aurobindo, 1990), and with that the ideal of aligning oneself with that development.

CONSCIOUSNESS, SELF, AND
THE FUTURE OF PSYCHOLOGY

The second area where these three conceptions of consciousness have a profound influence on the future of humanity, is epistemology. The physicalist view led in psychology to the almost universal adoption of behaviourism. In its early days, behaviourism was fixated on animal studies and it generated a theory of cognition based on experiments with rats, which were motivated by carefully orchestrated levels of starvation to learn arbitrary behaviour in exchange for secondary incentives. This utterly inhuman theory of learning was thoughtlessly transferred to education, where it created a system of education in which children learn to do whatever the system asks from them, in exchange for praise and grades. The result has saddled our planet with several generations of humans incapable of looking inside and willing to do virtually anything in exchange for immediate financial gain¹².

The Indian concepts of consciousness open up entirely different possibilities. If consciousness is in its origin and principle independent of the brain and the mental

CONSCIOUSNESS	PHYSICALIST	PURE	INTEGRAL
SCOPE	only individual only a tiny part of the manifestation	primary reality transcendent & individual, not in cosmos	all-pervasive transcendent, individual, & cosmic
RELATIONSHIP WITH WORLD	consciousness <i>emerges from</i> physical processes	physical world, <i>an imposition</i> <i>on</i> consciousness	physical world <i>a manifestation</i> <i>of</i> consciousness
PROPERTIES	epiphenomenal	no content; no structure; no action	passive and active; silent and dynamic; witness and king
AIM OF LIFE	not clear: survival? enjoyment?	liberation (<i>mukti</i>)	divine manifestation
EPISTEMOLOGY	all knowledge is constructed; only objective knowledge can be perfected	only knowledge of the Divine can be perfected; all other knowledge is imperfect & irrelevant	inner knowledge (inclusive intuition) can be perfected as well as (or better than) objective knowledge; it is needed for transformation

TABLE 1 – An overview of the three major conceptualisations of consciousness. [Author].

activities taking place in it, it should be possible to withdraw it from those activities and watch them with a perfectly detached objectivity. If the integral view holds, then it should also be possible to utilise the powers of consciousness for well-being, inner growth and transformation of human nature. And finally, the Indian theories of consciousness stem from idealist philosophies and imply the possibility of developing a faculty of true intuition¹³.

The Indian tradition claims that all these things are indeed possible, and the incomparable treasures of psychological knowledge the Indian civilization has developed over the ages seem to provide a powerful testimony in support of the validity of this claim. In the second part of this essay I will provide some detail on the “rigorous subjectivity”, which would be required to explore these possibilities further¹⁴.

FOUR TYPES OF KNOWLEDGE

Sri Aurobindo makes in one chapter of *The Life Divine*¹⁵ a distinction between four different types of knowledge that all occur in our surface awareness.

1 ~ The first, and original one, is hardly used in ordinary life, and almost forgotten in modern philosophy of science, even though the case for its existence is easy to make¹⁶. Sri Aurobindo calls it “knowledge by identity”, and it is the knowledge inherent in being. All we know of it in our naïve, surface awareness, is the simple fact of our own existence. Besides this, it is supposed to be the ultimate origin of the intuitive knowledge we have about the fundamental rules of logic and reasoning. In the Indian tradition it is called the dynamic truth-consciousness, *rta cit*, which makes things what they are.

2 ~ The second type is “knowledge by intimate direct contact”. It comes to the fore in direct, pre-reflexive experiential knowing, as in our awareness of our own thinking or feeling.

3 ~ The third is used in introspection, where one looks at oneself in a semi-objective fashion. Sri Aurobindo calls it “separative direct knowledge”: separative because one distances one’s self from what one observes, and direct because it does not need the outer, physical senses.

The difference between the second and the third type is that in the second type one says, “What a great day”, while in the third type one says, “I seem to be happy today!” In other words, in the second type, one knows one is happy without any need for reflection, while in the third, one looks at oneself as if one looks at another person and one notices and comments on what one sees going on inside.

4 ~ The fourth is our ordinary sense-based knowledge of the physical world, fully “separative and

indirect”: here one experiences oneself as entirely separate from what one observes, and one knows indirectly, by means of the physical senses.

For our ordinary, surface life, the division may not be so interesting, as these four modes of knowing generally occur together, but for the development of psychology the distinction between them is crucial. The reason for this is that science has mastered type four, “objective knowledge” and it has done so with stunning success, but it has failed completely to move ahead with the other three. Early attempts to use type three in introspection failed, as it turned out to be too difficult to make introspection reliable. As far as type two is used (in therapy and skill-training) it is limited to its most simple and superficial manifestations. Of type one, we have only used one derivation successfully, and that is mathematics and the basic intuitive insight that underlies much of scientific development. Yet it is type three, type two, and a more complete version of type one, that we need if we want to get some grasp on what happens inside ourselves as conscious human beings. That such inner knowledge is needed may not need much argument, for *all* serious problems humanity is presently facing, are ultimately psychological.

PERFECTING SRI AUROBINDO’S FOUR TYPES OF KNOWLEDGE

These four types of knowledge are in our unregenerate common nature far from perfect, but they can be perfected.

~ SEPARATIVE INDIRECT KNOWLEDGE. The expert mode of the fourth type of knowledge is science, and modernity is making stunning progress in this area. As separative indirect knowledge is the sense-based knowledge of the world outside of us, it is eminently suitable for studying the physical world, but it is not the best way to study psychological phenomena.

~ SEPARATIVE DIRECT KNOWLEDGE. In the third type, mainstream psychology failed badly because the introspection-based schools tried to improve introspection without standing back far enough: the observing consciousness did not stand back from the processes it tried to study but remained involved in them. In other words, in ordinary introspection one part of the mind watches other parts of the mind, and as a result the problems of bias, vested interest, and infinite regress remain unresolved. The Indian solution is more radical. It suggests withdrawing the consciousness entirely from its involvement in mental processes and watching what happens in one’s mind from a completely detached “witness” consciousness. The details of this process are obviously

complex, both theoretically and practically, and they deserve more extensive treatment than can be given here but there is one easy to notice difference between the two approaches to self-observation that deserves to be mentioned: In ordinary introspection, there is almost always a part of the mind that provides a running commentary, judging, approving, disapproving, comparing, associating, what not. In detached self-observation, there is nothing of the sort; there is only a completely silent, non-judgmental, completely relaxed yet sharply focused attention. It is, as the old texts say, the difference between a windswept, muddy stream, in which one can see nothing, and a silent, crystal clear pond, in which one cannot only see the reflection of the individual leaves of the trees on the other side, but also the pebbles on the bottom.

~ KNOWLEDGE BY INTIMATE DIRECT CONTACT. Interestingly, this detached observation seems to allow not only thorough knowledge of type three, unbiased access to one's own mind, but also, through type two, to what happens in others and even in things. The logic behind this is that consciousness is ultimately one and that the world is not only interconnected in the outer physical world, but even more so inwardly, on the more subtle inner planes of thoughts and feelings. In our ordinary waking state our consciousness is entirely wrapped up in the working of our own nervous system, but once it is freed from there, it can in principle contact anything it concentrates upon. This opens a door to the whole complex world of parapsychological phenomena, which present day Western science has to label "anomalous" because they do not fit in its far too narrow physicalist world view. If we accept the Indian consciousness-based means of developing psychological knowledge, an enormous world of "paranormal" psychological capacities and powers might open up to us.

~ KNOWLEDGE BY IDENTITY. In principle a further inner clarity should also open up a way to develop the first type of knowledge, knowledge by identity, which should enable a much more extensive use of intuition. The idea behind this even bolder claim is that the world is a manifestation of consciousness; that the original consciousness that manifested the world out of itself did so according to fundamental real-ideas and that as we free our consciousness from its involvement in the small creature we think we are, it can identify itself instead with that original, creative consciousness and thus know everything the way the Divine knows it, from the inside. We can leave most of this safely for a remote future, though one could look at the stunning progress humanity has made in recent years in the physical sciences as a sudden influx of knowledge of this first type into our collective mind.

THE FOUR KNOWLEDGE REALMS

Once we recognize how much the naive and expert modes of these four types of knowledge differ from each other, it becomes clear that there are actually eight clearly distinct forms of knowing that give access to eight different aspects of reality. For psychology it is practical to order these eight methods of knowing on a trajectory that reaches from the purely physical outer reality (studied by objective science) to the deepest innermost self (studied by yoga). Doing so, we can then group the aspects of reality which these eight methods of knowing allow us to explore into four distinct "knowledge realms": *objective knowledge*, *subjective knowledge*, *inner knowledge* and *self-knowledge*. Only the first two, *objective knowledge* and *subjective knowledge*, can be accessed with some confidence in the ordinary waking consciousness. Normally only an extremely limited, vague and often confused sense of the deeper realms of *inner knowledge* and *self-knowledge* can be obtained while one is in the ordinary waking consciousness. For a complete understanding of human nature a detailed and accurate knowledge of these realms is however essential, and getting access to them tends to require considerable "inner work". In the Indian tradition this inner work is often referred to as yoga and in this text we use the word yoga in this broad and general sense (without implying in any way that that it would not be possible to explore these two realms through other methods). TABLE 2 (following page) presents an overview of the four knowledge realms that are needed for a complete psychological understanding. It shows how the naive and expert modes of Sri Aurobindo's four knowledge types work themselves out into eight forms of knowing that can be used to explore eight different aspects of reality.

The four "knowledge realms" in TABLE 2 can then be described as follows:

~ OBJECTIVE KNOWLEDGE. This is the knowledge we have of the physical and socio-economic world around us. It is sense-based and (supposed to be) guided by reason and "common sense". There are two varieties of it. The naive variety is simply whatever ordinary people know about the world outside of themselves. The expert variety is science. These two don't differ in principle, but they differ considerably in their actual processes and results. Science is more rigorous, specialised and cumulative; the senses are extended by instruments that have been constructed with the help of knowledge of this same type; the reason is extended in the form of mathematics. Modernity is the scene of an almost incredible collective growth of this type of knowledge.

KNOWLEDGE REALM	KNOWLEDGE TYPE (acc. to Sri Aurobindo)	MODE	USAGE	KNOWN REALITY	
OBJECTIVE KNOWLEDGE	separative, indirect knowledge (4)	naive	A. ordinary, sense-based knowing	physical world	O W C
		expert	B. objective science		
SUBJECTIVE KNOWLEDGE	separative direct knowledge (3)	naive	C. introspection	outer nature	
	knowledge by intimate, direct contact (2)	naive	D. superficial experience	surface self	
	knowledge by identity (1)	naive	E. superficial awareness of own existence		
INNER KNOWLEDGE	separative, direct knowledge (3)	expert	F. witness consciousness (<i>sākṣibhāva</i>), <i>puruṣa</i> -based self-observation	inner nature	
	knowledge by intimate, direct contact (2)	expert	G. consciousness directly touching other consciousness		
SELF-KNOWLEDGE	knowledge by identity (1)	expert	H. gnosis, truth-consciousness, intuition	true Self, real-ideas	

TABLE 2 ~ The four knowledge realms needed in psychology. [Author].

~ SUBJECTIVE KNOWLEDGE. Subjective knowledge is the knowledge we have of what is happening inside ourselves. The word “subjective” has nowadays largely negative connotations, and I use it here only for the naive variety of what we know about our own nature and our own self-existence. Within the realm of subjective knowledge one can distinguish three types: a) introspection which is a naive attempt at being “objective” about oneself (knowledge of type three); b) experiential knowledge which deals with processes we intimately identify with (knowledge of type two); c) a basic awareness of our own self-existence. All three are limited in scope and “subjective knowledge” has access only to a very small part of all that happens inside ourselves.

~ INNER KNOWLEDGE. This consists of the sophisticated, expert variety of the first two types of knowledge of which subjective knowledge uses the naive variety. Expert knowledge of Sri Aurobindo’s type three is the pure, detached witness consciousness that allows genuinely “objective” knowledge of whatever happens in one’s own inner nature. The expert variety of type two, knowledge by intimate direct contact, allows one’s consciousness to touch directly the consciousness in others and even in things so that one can know these by an intimate, unmediated direct contact.

~ SELF-KNOWLEDGE. This is the expert variety of knowledge by identity (type one) and it leads us directly to who we are in the very essence of our being. The little of real self-knowledge that reaches our surface consciousness may never attain to that level of perfection, but according to the Indian tradition this type of knowledge is in itself intrinsically

true and perfect: It is the secret origin of whatever there is of real truth in all other types of knowledge. As there is ultimately only one Self, a perfect knowledge of oneself is also supposed to make perfect knowledge of everything else possible¹⁷.

As mentioned before, the realms of objective and subjective knowledge (as defined here) are the only ones that can be accessed fully in the ordinary waking consciousness (or OWC). Because we have made such tremendous progress with the expert variety of objective knowledge (at least in the physical domain), we tend to rely on it almost exclusively for our public affairs. Only where this type of knowledge can clearly not provide the answers, for example on issues that demand a value judgment, we respect subjective knowledge. The mainstream culture tends to doubt and distrust all forms of inner knowledge and what we have here called “self-knowledge”, deriding them as “essentialist”. The reason for this seems to be that the little we know about these inner realms tends to be encrusted in religious rituals and dogmas and in all kind of non-self-critical experiments and beliefs at the margin of the global civilization. As a result of all this, the little we know from here impresses the scientific mind as an intractable mixture of partial truths and total confusion that should perhaps be tolerated in people’s private lives, but that has no place in public life or the hallowed halls of science. To get high quality inner knowledge and self-knowledge, full inner control over a whole range of different types of consciousness and a considerable amount of inner discipline are required, and for this the West has no established method. Mystics and other exceptional individuals have of course managed this in all times and cultures, but it is the Indian tradition that has specialised in it, and in the process it

has developed an enormous amount of detailed know-how. I contend that a serious practice of some form of *jñāna-yoga* (yoga of knowledge) is likely to offer one of the most efficient ways to develop a more comprehensive psychological understanding.

CONCLUSION

According to Sri Aurobindo's synthesis of the various schools of yoga found in the Indian tradition, the most effective and comprehensive way towards freedom, happiness *and* deeper psychological knowledge needs two elements: the first is relocating the centre of one's consciousness by lifting it out of its entanglement in the activities of the ego, and by moving it into some more eternal, equal, immutable state. The second part is changing one's nature, by looking at it as an instrument for the soul to do its work in the world. There is a tendency to start with the second part, and one generally has to do a bit of it to enable the first step, but it is safer and easier to concentrate first on the first step, as the second is only fully possible once a sufficient level of detachment and inner freedom has been achieved. Interestingly this gradual finding of one's own highest Self tends to go together with an increasing familiarity, knowledge of and love for others and even for whatever one wants to call the Self of the universe. Connecting one's own consciousness with the highest consciousness one can conceive is then not only the most direct way to personal happiness and social transformation, but also the most powerful method to increase our individual and collective psychological knowledge and mastery. ◉

¹ The basic idea of this division into three major positions is derived from chapter II to IV of Sri Aurobindo's *The Life Divine*, in which he differentiates between the "Materialist Denial" and the "Refusal of the Ascetic" and then advocates an older, more integral approach. For an earlier version of this schema, see Cornelissen 2007, *Consciousness*. In this earlier version the "purity" vector was called "spirituality". Given the increasingly widespread tendency to understand spirituality in an integral, life-affirming sense, a change of terminology appeared to be asked for.

² Cornelissen 2008, *The Ongoing Evolution of Consciousness in Sri Aurobindo's Cosmo-Psychology*.

³ Churchland 1983, *Consciousness: the transmutation of a concept*.

⁴ Searle 2006, *Minding the Brain*.

⁵ *yathorṃanābhīḥ sṛjate grhṇate ca yathā pṛthivyām oṣadhayaḥ sambhavanti/ yathā sataḥ puruṣāt keśalomāni tathākṣarāt sambhavatīha viśvam// 7. tapasā cīyate brahma tato 'nnam abhijāyate/ annāt prāno manaḥ satyaṃ lokāḥ karmasu cāmṛtam// 8. yaḥ sarvajñāḥ sarvavid yasya jñānamayaṃ tapaḥ/ tasmād etad brahma nāma rūpam annaṃ ca jāyate// 9.*

⁶ The word used here, *karma* means works, but was at the time primarily used for the rituals of the *Rg Veda*, which have as their inner, symbolic meaning, the surrender of the human to the Divine, and the invitation of the Divine into the human, in other words what we would now call spiritual practice, or yoga.

⁷ Sri Aurobindo 2002, *Kena and Other Upanishads*: 132.

⁸ For a more detailed description of, and argument for the historicity of this shift, one may consult Sri Aurobindo's *The Life Divine*, and his commentaries on the *Isha Upaniṣad*.

⁹ In the West, and even in Urban India, the word "yoga" is now widely understood as indicating an effective technique to achieve physical fitness and mental relaxation. This is a caricature of what it meant originally. The Sanskrit word "yoga" means *yoke*, and it is used mainly for the path that leads towards re-union with the Divine and the unalloyed delight, immortality and true knowledge this is known to give.

¹⁰ Nagel 1979, *Mortal Questions*: 176.

¹¹ If one translates *puruṣa* as self rather than as consciousness, one can hold to the pure concept of consciousness and yet admit the dynamic power of the self who is then not only the *anumanta* (witness) as described in *Sāṃkhya* and some "pure" schools of *Advaita Vedānta*, but also the *īśvara* (lord) described in the *Gīta* and other more integral scriptures.

¹² For a more detailed exposition of the argument, see Cornelissen 2012, *Are Schools Injurious to Health?*

¹³ Mainstream psychology takes it for granted that all knowledge has to be constructed. Accordingly, it explains intuition as "expert knowledge": the outcome of a mental process that is too complex to be presented in its entirety to the surface consciousness. The idea is that in this case the underlying processes take place subconsciously, while at the end only an "executive summary" is presented to the conscious mind. As the outcome is high quality and pops up as if it comes ready-made out of nowhere, it then looks like intuition. From an Indian psychology standpoint, this phenomenon does exist, but should be called pseudo-intuition. For a more extensive explanation of the reasons why genuine intuition might also exist, see Cornelissen 2011, *What is Knowledge?*

¹⁴ The second part of this essay is based on presentations made at the Indian Institute of Technology, Kanpur, in 2008, and at the Centre for Indian Psychology, Jain University, Bangalore, in 2011.

¹⁵ Sri Aurobindo makes this distinction between four types of knowledge in "Knowledge by Identity and Separative Knowledge", chapter XVI of the second volume of *The Life Divine*: 543-572. For a further elucidation of their relevance to psychology one could consult Cornelissen 2011, *What Is Knowledge?*

¹⁶ Cornelissen 2011, *What is Knowledge?*

¹⁷ This is the *yasmin vijñāte sarvam sarvavidam vijñātam*, the highest source of knowledge, knowing which everything here is known (*Śāṅḍilya Upaniṣad*, 2.2).

REFERENCES

- AUROBINDO, SRI (1940/2005). *The Life Divine*, (Pondicherry: Sri Aurobindo Ashram Publication Department).
 — (1955/1999). *The Synthesis of Yoga*, (Pondicherry: Sri Aurobindo Ashram Publication Department).
 — (2003). *Isha Upanishads*, (Pondicherry: Sri Aurobindo Ashram Publication Department).

- (2002). *The Kena and Other Upanishads*, (Pondicherry: Sri Aurobindo Ashram Publication Department).
- CORNELISSEN, R. M. M. (2007). “Consciousness” in Ramakrishna Rao, Ajit Dalal (eds.) *Handbook of Indian Psychology*. (New Delhi: Foundation Books).
- (2008). “The Ongoing Evolution of Consciousness in Sri Aurobindo’s Cosmo-Psychology”, in H. Wautischer (ed.), *Ontology of Consciousness: Percipient Action*. (Boston: The MIT Press).
- (2011). “What is Knowledge? – Reflections based on the work of Sri Aurobindo”, in R. M. M, Cornelissen, G. Misra, & S. Varma (eds.), *Foundations of Indian Psychology, Volume 1: Concepts and Theories*. (New-Delhi: Pearson Education).
- (2012). “Are Schools Injurious to Health? The implicit curriculum and its relation to mental health”, in Usha S. Nayar (ed.) *Mental Health of Children and Adolescents: Culture, Policy and Practices* (New Delhi: SAGE).
- SEARLE, J. R. (2006). “Minding the Brain” in *The New York Review of Books*: 53(17).
- CHURCHLAND, P. S. (1983). “Consciousness: the transmutation of a concept”, *Pacific Philosophical Quarterly*, 64: 80-95.
- NAGEL, T. (1979). *Mortal Questions*, (Cambridge, MA: Cambridge UP).





TEACHING IN THE NEW PARADIGM

CHRISTOPHER M. BACHE



Christopher M. Bache, PhD. is professor emeritus in the department of philosophy and religious studies at Youngstown State University in Ohio where he has taught since 1978. He is also adjunct faculty at the California Institute of Integral Studies and a Fellow at the Institute of Noetic Sciences where he was Director of Transformative Learning for two years (2000-2002). His teaching has focused on world religions, psychology of religion, transpersonal studies, and Buddhism. An award winning professor, his work explores reincarnation, the philosophical implications of non-ordinary states of consciousness, and the dynamics of collective consciousness in educational settings. He is the author of three books: Lifecycles, Dark Night Early Dawn, and The Living Classroom.

EVERYWHERE WE TURN SCIENTISTS ARE FINDING that systems we had previously thought were separate are actually interconnected. Chaos theory has demonstrated that nature is awash with patterns of fractal iteration and holographic inclusion. Bell's theorem reveals a universe that is instantaneously aware of itself across vast distances. Weaving together findings from quantum physics, post-Darwinian biology, cosmology, and consciousness research, Erwin Laszlo has written compellingly about the A-field, the superimplicate order behind our explicate world, a domain where nonlocality and superconductivity is the norm (1999, 2003, 2004). Though quantum entanglement was originally thought to be restricted to the sub-atomic realm, we are now finding evidence that its effects "scale up" into the macroscopic world (Brooks). Clearly, interconnectivity is a major theme of the new paradigm.

And yet when we turn to the practical art of teaching, it is as though we still live in a Newtonian universe of separate selves and isolated minds. The revolution of connectivity has not yet transformed our pedagogical models or changed how we engage our students in the classroom. But the interconnected universe shows itself here too if we

allow ourselves to see it. If we open to the deeper textures of our lived experience with our students, we discover that underneath the obvious truth of our separate and distinct minds lies a less obvious but equally important truth – that our minds mix and mingle in a subtle web of influences, that they move in sync with one another forming larger wholes, and that in our depths we are never isolated from one another.

After thirty years of having my teaching transformed by these dynamics, I wrote *The Living Classroom: Teaching and Collective Consciousness*. While it draws on scientific research, it is primarily a story of experiential discovery. It offers a sketch of how I think we will teach in the new paradigm.

EARLY SPARKS OF SYNCHRONICITY

It was an ordinary day at the university where I teach in the department of philosophy and religious studies in Ohio. The lecture was finished and the room was emptying when a student came up to me and said, "You know, it's funny that you used the example you did in class today, because that's exactly what happened to me this week." Then he described his recent experience and it was, indeed, a perfect match to what I had said in class.

I had been searching for an example to illustrate a particular concept I was trying to convey. Quickly running through the possibilities in my mind, my stream of consciousness had paused, and out of the stillness an example I had never used before suddenly rose to my awareness. "Try this," it said. I used it and it had worked. The students got the point and the lecture continued. But what had been a randomly chosen example for other students in the room cut closer to the bone for this particular student. When he heard his life experience coming back to him in my words, it grabbed his attention. It was as if he had been extended a personal invitation to get more deeply involved in the course, and he did.

The first time this happened, I brushed it off as mere coincidence, as good academics are trained to do. In the reigning materialist paradigm, we are taught that our minds are fundamentally separate and discrete entities, one mind per brain. Any suspected overlap or bleed-through between minds is said to be impossible

– an illusion, a fiction of our imagination. When you think of all the life experiences tucked inside our students, surely we’re going to bump into some of them once in a while. If you lecture to a hundred people week after week, sooner or later you’re bound to hit a few bull’s-eyes even with your eyes closed. Do the math and it looks less significant than it feels.

And yet this “coincidence” happened again a few months later, and again after that. In the following years, it became a not uncommon occurrence in my classroom, happening often enough that I couldn’t dismiss it. My students were finding bits and pieces of their recent life experience, or the experience of a close family member, showing up in my lectures. Without my intending it, without my even being aware when it was happening, my consciousness seemed to be tapping into some kind of information field that held their life experience. The fit between life and lecture was so precise and repeated itself so frequently that eventually I was convinced that something more than chance had to be operating here. But how and why was this happening? Both as a philosopher studying in consciousness and as an educator, I had to understand what was driving these events.

RESONANCE IN THE CLASSROOM

One evening, for example, I was teaching a night course on Eastern religions. There were about thirty students in the room. In the middle of my lecture, I found myself taking a little unexpected detour in which I told a story about a Zen master who had had an accurate precognitive perception of his impending death, similar to the accounts Sushila Blackman later published in her book *Graceful Exits*. I had never talked about this subject in this particular lecture before. It was just a little aside, something dropped in to add some anecdotal interest to the discussion we were having about the capacities of the mind from an Eastern perspective.

After class, a silver-haired elderly lady came up to talk with me. She was not part of our usual group but had been brought to class that evening by a friend who was worried about her. Her husband had died three months before, and her friend thought she was languishing at home and needed to get out of the house. In the conversation that followed, she told me this story.

Her husband had been a used car salesman in good health. Shortly before his unexpected death, he had cleared out most of the cars from his lot without any explanation and gotten all his financial papers in order. A few days later, he and his wife were watching TV when he put down his newspaper and, in a way that was quite out of character for him,

turned to his wife and said, “Darling, I just want you to know that if I died tomorrow, you’ve made my entire life worthwhile.” A week later, he died in his sleep.

What she wanted to know was whether I thought her husband might have been unconsciously aware that he was going to die, like the person I had described in my lecture. I said that it sounded like a possibility, and this thought was comforting to her. This led to a longer conversation in which she described the challenges and opportunities his passing had created for her. After touching her grief, she began to talk about how overprotective he had been and how she was now being given the chance to develop herself in ways that his well-intentioned care had always prevented. In the middle of the conversation, she suddenly decided to come back to college. She did so and thrived here for several years, eventually bringing two generations of her family back to school with her.

When these things first started happening in my courses, I was in the early stages of my career and the early stages of my spiritual practice, and here the plot thickens. To make a very long story short, as my spiritual practice deepened through the years, these synchronicities became more frequent in my classes. It was as though by entering more deeply into conscious communion with the underlying fabric of life, the threads of that fabric were being activated around me in the physical world. The experience of greater *depth* seemed to be triggering experiences of greater *breadth*, as though depth and breadth were two different dimensions of a seamless whole.

Not only were these synchronistic resonances becoming more frequent, they were also targeting increasingly sensitive areas in my students’ lives. It was as though a radar had been activated that was operating below the threshold of my awareness, a radar that zeroed in on some part of their life that was hurting or constricted. Sometimes it touched a question they had been holding for years or triggered an insight they had been searching for, something they needed to find before they could take the next step in their development. Sometimes it lanced a private pain that had been festering inside them. In this mysterious communion that opened between us, it was as if my students’ souls were slipping messages to me, giving me hints on how I might reach them – telling me where they were hiding, where they were hurting, and, most importantly, what ideas they needed to take the next step in their lives.

As the years passed and the process deepened, my students also began to have unusually deep experiences around some of the concepts I was presenting

in class. It was as though they were being activated by more than just verbal ideas, as though they were being touched by the actual *experience* of these realities that now lived in me to some degree because of my spiritual practice.

As a professor of religious studies, I have taught more sections of “Introduction to World Religions” than I care to remember; it’s a staple in our department. My approach to this course has been deeply influenced by Huston Smith and the “perennial tradition” – ideas so essential they keep showing up in multiple cultures throughout history, like perennial flowers that reemerge each spring. When students hear the perennial truths of the world’s spiritual traditions simply spoken, when they are reminded of things long ago forgotten but always present at the edge of their awareness, there is sometimes a spark of recognition that can explode into a flame. This flame is contagious and sometimes stimulates sympathetic resonances with other students in the room. Students may collectively feel their energy shift to higher centers of awareness, though they may not understand what is happening at the time. Symptoms of chakra-opening and kundalini-type arousal may begin to manifest. Energy runs, hearts open, and insights arise.

These can be very powerful experiences for students. One sophomore described such an experience in an essay she wrote at the end of a course. It happened to her on the day I was describing the Buddhist understanding of the relationship of individual mind to non-dual consciousness. To convey this point, I sometimes develop the analogy of a tree, contrasting leaf-consciousness (the personal mind) with tree-consciousness (non-dual consciousness). In this exercise, I ask the students to imagine that the leaves of a tree are individually aware but not yet conscious of the tree they are part of, until the moment of breakthrough. It’s a powerful exercise that I save until I think the class is ready to absorb its full import. On this particular day, this young woman experienced the following:

The thing that hit me the hardest of all that we talked about in class was tree-consciousness and leaf-consciousness. It was what brought everything together for me. What made me understand everyone’s interdependence and stopped me from living in fear. I was so moved that it took everything that I had not to cry in class, not from sadness but from being hit by a life-altering realization. It made an emotion rise in me that I had never felt before and I wasn’t really sure how to react to it (2008: 27-28).

Another student, a woman in her mid-thirties, summarized a similar experience in a different class in the following way:

Sitting in class, I felt like I was inside one of those glass ball snow scenes that folks use as paperweights. Shake the ball and mass confusion begins with flakes of fake snow swirling

all around... I couldn’t hear the lecture. My mind struggled to focus and stay with your words, but I was missing it.

Later... at home... alone. It would all return to me, the lecture... Mostly feelings. Tears. Recognition. Understanding after I let it simmer for a while. Realization that if I didn’t grab at it, it would be there waiting, this knowledge. These tiny bright spots of revelatory insight. I’d journal. I’d cry. Sometimes light and gentle, warm feel-good crying. Sometimes sobs, wracking and exhausting. I THOUGHT I WAS LOSING MY MIND A FEW TIMES ...

The result? I’m becoming who I was long ago. The field by-passed my intellect and went directly to my heart to pry it open.... I now know what I had deeply buried in me for years, and the gift of the pick and shovel for the ongoing process comes from being in the energy of the folks in our classroom. It didn’t come from me alone (2008: 28).

I want to emphasize that it wasn’t my intention to trigger such deep existential reactions among my students. In fact, fearing that they were out of place in a university setting, I often tried to damp them down, but I found that this was impossible without damaging the teaching process itself. Whenever my students and I would gather and simply cover the day’s assignment, these events would spontaneously occur without my consciously intending them. It was as though fire was lighting fire. When we would simply focus on the task of sharing understanding, these *resonances of living experience* would spring up unpredictably – not always but often – drawing the students into heightened states of awareness.

THE CHALLENGES OF SELF-TRANSFORMATION

Most of the students who were touched by these dynamics experienced them as uplifting, even exhilarating “Aha!” moments. For some students, however, the process presented them with difficult personal challenges. As the spiritual literature makes clear, purification is the companion of liberation. Before we can realize the greater being that we are, we must confront and release whatever is holding us back from realizing this potential – some habit of thought, some emotional constriction. When some of my students were activated by what I believe is a life-enhancing process, their systems began a process of spontaneous detoxification – shedding of old patterns, old ways of thinking and feeling. I do not believe this would have happened to them if they had not been ready for it at a deeper level, even inviting it. They entered this transformational process because they were ripe for it.

These cathartic activations became particularly pronounced during a period of several years when I was undergoing a series of powerful transformative experiences in my personal practice that were breaking me down at very deep levels. The details of these

experiences are not important here and are described in my book *Dark Night, Early Dawn*.

Many spiritual traditions describe a phase of inner work that involves dissolving the boundary between self and other. They describe a membrane that marks the boundary between one's individual mind-field and surrounding fields of awareness. On the near side of this membrane, the world appears to be composed of separate beings, each with their seemingly private existence. On the far side of the membrane, the world appears as an integrated whole, a continuum of energy that is unfathomably complex and extravagantly beautiful. Hence, this boundary membrane is often described as the domain of death and rebirth, death to the prison of the private self and rebirth into a larger order of wholeness that underlies and saturates life's diversity. When a practitioner is transitioning through this territory, standing at the interface of these two paradoxically compatible realities, powerful synchronicities with surrounding persons sometimes manifest.

As my inner work came to focus on this boundary, triggering the purifications that typically accompany this transition, some of my students began to simultaneously undergo particularly difficult challenges in their lives. Most of my students did not enter these waters, of course, and passed through my courses untouched by these dynamics, but some did enter them. Those who did so sometimes felt themselves coming to a breaking point in their lives or a moment of supreme risk-taking. It was as though they and I were being drawn together through a collective death-rebirth vortex, a vortex that was breaking all of us down in different ways, uprooting deeply buried pains, and crushing restrictive barriers in our lives.

Some students chose to end bad marriages or to heal wounded ones. Others left careers they had outgrown but were still holding onto. (Thirty percent of the students at my university are older, non-traditional students.) Some began to confront their addictions and others to re-approach persons from whom they had been estranged for many years. One woman in her mid-forties hints at the profound disruption of her inner and outer worlds that occurred during this period when she began to spontaneously recover painful memories of child abuse, in a Buddhism course of all places:

During and after having been in your classes, my internal world became increasingly chaotic as demons from painful psychological gestalts began to emerge, and eventually coloring my external world too, challenging everything I thought I was and dissolving familiar reference points [...]. As I struggled to break through powerful gestalts of pain, you spoke to and nourished my soul, making it possible for me to move more deeply into my spiritual journey (2008: 32).

Obviously the phenomena I'm describing raise important pedagogical and ethical issues. As my students came to me with these reports and I saw how deeply they were being affected by this mysterious alchemy that had opened between us, I was more than a little shaken myself. Neither of us had solicited this connection, yet here it was. Did I need to protect them from what was happening? Obviously this was not what they had consciously signed up for when they had signed up for my course. How does one ensure informed consent when the dynamics are so involuntary and beyond the pale of current academic discussion?

While the activation some of my students experienced during this period was quite powerful, there were no casualties and many positive breakthroughs. On the rare occasion when a student's self-transformation became particularly turbulent, I referred him or her to a gifted therapist in the area with whom they could process what was emerging in a safe setting.

THE ECOLOGY OF CONSCIOUSNESS

While these kinds of responses might be expected in certain types of courses, such as a counseling course, this is not the case for the kind of courses I was teaching. It was not the content of the course that seemed to be driving these effects but something deeper. I believe it was the *interaction of our subtle life energy underneath the exchange of words and ideas*. What was triggering these effects was not what I was *doing* but what I had *become*. Because of the intense practice I was doing at the time, my energy was running differently. Or to put it more carefully, the field of energy of which "I" am a part was flowing more strongly.

The experiences my students were having appear to demonstrate a simple principle: *clarified states of consciousness are contagious*. My efforts to realize deeper states of awareness seem cause my person to begin acting as a kind of lightning rod triggering sparks of a similar awakening among those students who were receptive to this influence. Like ripples spreading across water, this is an utterly natural effect. When one person begins to throw off layers of egoic conditioning and to awaken to clearer, more inclusive states of awareness, surrounding persons will be affected. This is due to the nature of consciousness itself. Our spiritual ecology simply does not permit private awakening. The ecology of consciousness is an *inherently* collective ecology.

Though this suggestion is still regarded as heretical in most academic circles given the dictates of the Cartesian-Newtonian paradigm, it raises fewer eyebrows in spiritual communities, which have long known

that persons undergoing deep transformation affect those around them in subtle ways. Satprem, for example, discusses this phenomenon in his biography of Sri Aurobindo (1993) where he writes:

[...] Sri Aurobindo and the Mother would realize that transformation is not just an individual problem but one involving the earth and that no individual transformation is possible (or at least complete) without some degree of collective transformation [...] It should be noted that each time Sri Aurobindo and the Mother had some experience indicating a new progress in the transformation, the disciples, without their even knowing anything about it, experienced in their consciousness a period of increased difficulties or even revolts and illnesses, as if everything were grating. Now we begin to understand how things work (291).

Similarly, scholar-practitioner Mike Sayama mentions this phenomenon in his book, *Samadhi* (1986). In his discussion of the dynamics of *ch'i*, Sayama quotes the Japanese healer Kaneko Shoseki who observes:

Apart from the normal communication between men through language and action there is another quite different sort of mutual influence. It is that of the rhythm of the Original Strength which permeates all human beings and Nature. Through it every individual thing [...] is connected with every other. If then one who is further removed from the working of the Primordial Force is close to one who lives more in accord with it, the rhythm of the Primordial Force will certainly be transmitted from the one to the other. The latter without knowing it exerts a good influence on the other (80-81).

LEARNING FIELDS AND GROUP MINDS

In addition to the experiences listed above, there were other anomalies taking place in my classroom that pushed me to look beyond these individual resonances to the collective dynamics of the class as a whole.

Perhaps the most important observation that pushed me toward a collective reading of these events was the sheer magnitude of the forces that seemed to be involved. Too many people's lives were being too deeply affected for me to conceptualize what was taking place solely in terms of resonance with my individual energy. If my person was in some way a catalyst for these experiences to surface among my students, what was actually surfacing was something larger than I alone could be generating. As I made the shift to thinking of this larger "something" in terms of a collective field of consciousness, a variety of conceptual and experiential pieces began to fall into place.

Students were becoming more porous not only to me but also to each other. They sometimes showed up in each other's dreams in significant ways. Synchronicities were increasing between them, and life-expanding coincidences were becoming common in

my courses. As one male student who returned to college after a twenty-year absence reported to me:

Each quarter seemed to bring new and unexpected changes and synchronicities. I entered into a web of personal relationships and meetings with people that profoundly influenced my life. I was "finding" individuals whose circumstances were eerily similar to my own; people who knew friends of mine from obscure places in the world; people who seemed to be reading the same books at the same times and having experiences that were transforming them in the same shattering yet exhilarating ways (2008: 44).

A female student sent me the following description of the connectivity she had experienced with other students in several courses.

All of us who have been in your classes feel a deep connection to one another. We don't know what it is. We only know that it is there. All that I know is that I have felt something binding us all together. I remember things going on around me in class with the other students. We were sensitive to each other's thoughts and feelings [...] I always wondered if you knew what was going on because you never said a thing in class! (2008: 44).

Sometimes insights surfaced in the room that seemed to come not from me or from any individual student but rather from the strength of our combined collective awareness. This is a very subtle but distinctive experience.

Sometimes when I am simply doing my job covering the day's assignment, it's as if the floor suddenly falls away. The atmosphere in the room becomes supercharged, and everyone seems to congeal into a unified state. My mind becomes unusually spacious and clear, and my students' eyes tell me that they have moved into a particularly receptive state. Our hearts seem to merge, and from this open field of compassion comes a slow stream of thoughts that I, as spokesperson for the group, unfold and work with.

In these transient moments of heightened awareness, I sometimes have the acute sensation that there is only one mind present in the room. It's as if the walls that usually separate us have become gossamer curtains. Individual persons melt into a softly glowing field of energy, and this unified energy thinks and feels and hungers to speak. Because this field incorporates the life experience of everyone present, of course we sometimes find the details of our separate histories surfacing spontaneously in it. Because it embodies our private hopes and fears, of course we are sometimes deeply touched by what comes out of it.

And then there was the strange way that my students began to periodically "jump forward" in their learning *en masse*. I found that periodically I had to adjust my course material because the students seemed to have taken a quantum step forward in their receptivity to the ideas being presented. After years of using a carefully designed roadmap to achieve a specific

intellectual outcome, a new crop of students would signal me that they were already weeks ahead of me in the syllabus. It was as if they had found a shortcut to certain conclusions and no longer needed to be taken the long way around.

Of course, many factors may have contributed to this development, including general shifts in cultural insight, self-selecting student populations, and improved pedagogical delivery. But after watching this cycle repeat itself numerous times through the years, I'm convinced that there was more going on than just this. These shifts take place too suddenly and too frequently for them to be fully accounted for by these explanations.

Slowly I began to recognize that there was a *meta-learning* taking place behind the scenes, a pattern of collective learning that ran deeper than the learning of individual students. I began to hypothesize that there were *learning fields* growing around my courses, fields of consciousness that registered the learning taking place semester after semester, fields of influence that were making it easier for subsequent generations of students to learn the same material.

Readers familiar with Rupert Sheldrake's pioneering work on morphic fields will recognize his influence here (1981, 1988, 1991). Sheldrake helped me make sense of these phenomena by allowing me to see them as symptoms of a collective mind growing stronger over time. His work gave me permission to take the radical step of recognizing that not just individual persons with complex nervous systems have minds, *groups also have minds*. My experience with my students year after year pushed me to take his revolutionary hypothesis concerning the species mind one step further. Even *transient groups* can manifest a kind of group consciousness under certain conditions. From my perspective, these conditions are: 1) collective intention focused in an emotionally engaging group project; 2) a project of sustained duration, and 3) repetition of the project in approximately the same form many times¹.

If consciousness is a field and fields are by nature porous, the learning of one individual cannot be isolated from the learning of others nearby. Recognizing the field-like nature of mind makes it easier to understand how minds might link together, even "phase lock" with other minds to form larger operational wholes. This tendency to synchronize with nearby systems is not unique to consciousness but is characteristic of nature as a whole. As Steven Strogatz says in his book, *Sync*, "For reasons we don't yet understand, the tendency to synchronize is one of the most pervasive drives in the universe, extending from atoms to animals, from people to planets."

To teach consciously in a world where minds are separate at one level and yet "entangled" at another calls for a more intentional pedagogy than envisioned in the atomistic Newtonian paradigm. The paradigm emerging today emphasizes the inherent connectivity of life and the powerful tendency of nature to synchronize its many parts into larger wholes (Bloom, Kaufmann, Radin). Accordingly, the pedagogy that will accompany this paradigm will recognize the innate connectivity of consciousness and the contagious quality of states of awareness. In *The Living Classroom*, I outline the strategies I developed over many years to work constructively with these natural forces.

INTERCONNECTIVITY AND INDIVIDUALITY

In closing, I want to emphasize that the collective dynamics of consciousness I've been pointing to here do not cancel or negate the individuality that we rightly prize so highly in the West. While a growing body of research suggests that our actions and intentions affect each other in hidden ways, within this matrix of connectivity individuality is not suffocated but is paradoxically liberated into deeper forms of self-expression. The self that consciously participates in the larger flows of life and the transparency of being becomes more than the self who did not do so. Experientially opening to the collective fields that surround us melts the boundaries of the private ego, bringing about the "death of self" spoken of in the spiritual literature, but as the ego dies a *deeper form of individuality is being birthed* – not an isolated individuality but one that thrives in this subtle give and take, an individuality with expanded responsibilities and a longer time horizon. In the end, I think we will see that expanding the breadth of our conscious participation in the surrounding matrix of life is actually bringing forward a new depth of personal presence in history. ◉

¹ See Bache, 2008: § 2. When I say that a group has a "group mind," I don't mean to suggest that it has a centre of prehension or agency that controls its many members in ways comparable to how "I" control the limbs of my body. Nor am I suggesting that it is self-aware in the same way or to the same degree that we are self-aware. As a field of influence, a group mind does not usurp the freedoms, rights, or responsibilities of the individual minds that compose it. The challenge here is to envision forms of integral intelligence that augment and complement the individual human abilities we rightly value so highly.

R E F E R E N C E S

- BACHE, C. (2000). *Dark Night, Early Dawn* (Albany, NY: State University of New York Press).
- (2008). *The Living Classroom* (Albany, NY: State University of New York Press).
- BLACKMAN, S. (1997). *Graceful Exits* (Boston: Shambhala).
- BLOOM, H. (2000). *Global Brain* (New York: John Wiley and Sons).
- BROOKS, M. (2004). “Quantum quirk may give objects mass”, in *New Scientist*, October 24.
- GOSWAMI, A. (1995). *The Self-Aware Universe* (New York: Tarcher/Putnam).
- KAUFMAN, S. (1995). *At Home in the Universe* (New York: Oxford UP).
- LASZLO, E. (1999). *The Interconnected Universe* (Singapore: World Scientific Publishing).
- (2003). *The Connectivity Hypothesis* (Albany, NY: State University of New York Press).
- (2004). *Science and the Akashic Field* (Rochester, VT: Inner Traditions).
- RADIN, R. (2006). *Entangled Minds* (New York: Pocket Books).
- SATPREM. (1993). *Sri Aurobindo or The Adventure of Consciousness* (Pondicherry: Sri Aurobindo Ashram).
- SAYAMA, M. (1986). *Samadhi* (Albany, NY: State University of New York Press).
- SHELDRAKE, R. (1981). *A New Science of Life* (Los Angeles: J. P. Tarcher).
- (1988). *The Presence of The Past* (New York: Vintage).
- (1991). *The Rebirth of Nature* (New York: Bantam).
- STROGATZ, S. (2003). *Sync* (New York: Hyperion Books).





DREAMING EARTH

M I C H A E L D . A U S T I N



DREAMING EARTH
MICHAEL D. AUSTIN

For sport, joy and sustainability, Michael D. Austin integrates information from seemingly disparate fields into useful thought and action. Austin is an environmental journalist via Blue Planet Almanac, mentors executives, key managers and individuals with

Practical grIntuition trainings, edits a modest web page on non-local consciousness (<http://www.facebook.com/NonlocalAwareness>) and does business development and technology with Warner Bros. animation characters and athletes, benefitting nonprofits (<http://www.TheUnstoppableEarlCampbell.org>). This year Austin rekindled his personal inquiries about the Chumash Western Gate. He read religious studies and environmental studies in University of California, attended Rosalyn Bruyere's Healing Light Center, and was an interpreter for the United States' seventh Sister City program. Website: <http://PracticalgrIntuition.com>; email: mike.austin@practicalgrintuition.com.

If you would divine the future, study the past.

CONFUCIUS

As Above...

WE LIVE BY THE grace of our planet. Billions of people like you and me are examples in awareness of their own microcosm, in their own environments. It is our collective voices, expressed in our daily choices which change the world or make it the same. In the aggregation of our collective experience we will find our salvation in sustainability by our own hands. I have watched the world a long time, and it is clear the only things which will

save us from our destructive choices are compassion, self-love and sense.

Yet, it is forever impossible to take the man out of Earth, or Earth out of the man. We are together, joyfully embedded. The two are beautifully inseparable and intertwined, and can by nature never grow apart. Two hundred thousand years ago we arose from Earth, as an integrated part of it. Twenty five thousand years from now, we will still be part of Earth's systems.

Sustainability and development could be best distilled to an approach in policy and life similar to that suggested by Tenzin Gyatso, the 14th Dalai Lama. He would say that most of our challenges in sustainability can be solved through compassionate, living connected to Earth, and that most of us spend too much time between our ears, instead of living in connection to the world. Of course, to be successful in consciousness or development, one's personal experiences must be accessible and shared. Community is formed through shared stories.

"What story do you chose to live by?" is a question writer Catherine Ann Jones would ask. How about your own experience of Earth – of Gaia? What are your experiences like, and what do you want? In addition to your role in shaping environmental, social or

financial policies, are you a loving householder, are you spectacular at calculus, do you find magic when a soccer pro spins the ball on his index finger? Do you raise what you eat, or paint art that makes tears well up in collectors' eyes?

What is framed in your windows to Earth? Who do you see? What do you eat and drink? Do you pay real attention to the signs the Earth provides in support of its life? Each individual must answer these questions for himself. Our joys in survival



FIG. 1 - Earth 1999. Europe top left, India toward center. [NASA/Marshall].

are also a direct result of the skills our successful ancestors practiced hundreds of thousands of years ago, as when they came home from a successful hunt, or when they gathered wild edibles.

Lately our kind are constantly pushing the limits of our experience as well as Earth's capacities. In daily life, science or sport, our living sometimes carries an adrenalin rush from that same heritage. People love feeling vibrantly alive, and we sometimes crave greater risks which make the feeling stronger. As anti-environmental as it seems at first glance, as an experience in consciousness and adrenalin I have many times loved piloting a street performance car at triple-digit speeds on racetracks. An unparalleled, peaceful stillness of mind arises from your focus. More than once at triple-digit speeds I felt a *huge* sense of my surroundings, and my field felt like a sphere 90 meters in diameter, reaching deep into the Earth. Safely back in the paddock, you can slice your sense of expansive exhilaration with a knife and serve pieces to your friends! Such an experience is a direct result of our heritage in the wild, and our place on Earth.

With 50 years' environmental perspective in a broadly-experienced North American body, I also hosted Blue Planet Almanac talk radio¹. Through my show, I had the fresh honour and pleasure to interview widely-regarded, Earth-conscious experts from different countries and diverse fields, discussing sustainability with them in a subtext of consciousness. I regularly asked them what sustainability meant in human development. In addition, I delivered separate, spoken environmental news segments. One global fact learned from Blue Planet Almanac is there has been little change in our kind's march of environmental dominionism during the past four years, or even 50 years. To be sure, there have been notable pauses on our path. Yet, most of us still prefer to separate ourselves from a daily experience and appreciation of a natural Earth. Our shared stories remain at arm's length from our deep heritage. Most of us prefer subdued pastoral scenes or cities instead of Thoreau's preservation of the world through wildness.

But our lives remain the choices made manifest by our values. We still endanger all of agriculture on the planet. In 2011, I interviewed master beekeeper Tom Theobald, who was credited with taking the US to task about falsified testing of neonicotinoid pesticides². Bayer AG still makes them, and we still buy and use them although they are clearly implicated in bee colony collapse disorder. Suppressing our connections to the Earth, people in any country still try to suppress other's wills. In the United States, the planetary, unseen consequences of the 2010 "Citizens United"

decision by the US Supreme Court³ are only now being understood and challenged⁴. The Citizens United decision allows US corporations many of the same rights as individuals and also allows unlimited, hidden spending by corporations in national elections. It is simple to figure the downstream consequences of such a corporate grip on policies in sustainability or development. "Corporate virtual states" as I have seen Stephan A. Schwartz refer to them^{5,6} now encircle the globe, hidden beneath the onion-layers of public relations divisions. Virtual, corporate policies are often beyond the sight or regulatory reach of a nation's people.

How will it be possible for sane stewardship of Earth's lives and systems, while we cannot even honour in compassion our own kind? The US government is now enacting new and chilling laws regarding the same personal freedoms, which 245 years ago its founders declared to be inalienable rights. One such law, passed in April 2012, allows unwarranted strip searches of any US citizen⁷. Other new laws allow acts against US citizens like their assassination, indefinite detention, the use of secret evidence against them in secret courts, as well as the commonly discussed invasive surveillance of individuals⁸. United States government agents are now routinely given immunity from prosecution for their war crimes. All of this came from the member nation of the Organization for Economic Cooperation and Development, whose infant mortality rate ranks 31st out of its 34 members. In 1960 the US was 12th in rank⁹.

In a common American sense of the world "development," it refers to real estate, and that has not changed in decades. This old-school connotation means that the highest and best use of land is its profitable commercial development. In any country such a policy obliterates natural ecosystems by laying down tarmac and buildings. But while there are still somnambulists, many of us have instead seen what is happening here and in the other countries. What is new under the Sun for everyone on Earth, including increasing numbers of forward-looking Americans, is the realization that our kind have created environmental situations which are straightforward in origin, but which have unpleasant solutions.

From a nation with a history of using a disproportionate quantity of the world's resources while having just 4% of its people¹⁰ you would imagine most US citizen's definition of the concepts of development, sustainability and consciousness are self-serving. Yet, in all industrialized nations, all of us love resource-intensive tablet computers, smart phones, electricity and fossil fuels. Even I use them. Every Group of Five nation aspiring to the Group of Eight wants its own technologically-intensive style of living. Among other, developing

nations who dream of “higher standards of living”, nature is often held at arms-length. From this approach will still be paid inescapable environmental costs by every living thing.

What is new in the past few years is that larger numbers of us are now thinking and feeling from the realization that we could have interconnected futures. That would seem to be a natural evolution of our consciousness. In this context you have likely heard of the “Gaia theory.” It is the scientific notion recently credited to technologist James Lovelock¹¹, that the Earth’s myriad ecosystems contain homeostatic mechanisms that maintain our planet’s stability. Lovelock is careful to mention he does not think Earth does this consciously. By his pen, there are five books with “Gaia” in their titles. In the book section of Amazon on-line shopping site, 4,186 results were returned in searching for that same word.

Lovelock’s Gaia theory, or the related, popular feeling of “Gaia consciousness¹²” are very similar but infinitely valuable tools to our kind. Attitudes of interconnection help us realize that our actions are not isolated, so we can imagine the downstream effects of how we live. Many aboriginal traditions feel and believe that Earth’s systems are conscious. We became a clever species with superior imagination and power. Thus, observing or imagining our experiences from 15,000 meters above the Earth is useful and many good thinkers and feelers do that. You get a beautiful picture of the trillions of lights in the preponderance of areas we inhabit. You realize we now cover Earth.

Yet, some of us have realized the time for proving our power and dominion over the Earth is centuries past. Now is instead a time of awareness of our long moment as a species integrated with its home. In this spirit, the Long Now Foundation was co-founded by Stewart Brand, and “...was established in 1996 to creatively foster long-term thinking and responsibility in the framework of the next 10,000 years.¹³” Brand was creator and editor of the Whole Earth Catalog.

We are social, tribal animals – groups of an organism that find it tricky to act upon or intellectualize about the impact of our kind beyond our own noses. Our early nature had clear and proven survival values in our distant pasts. Eventually, our perspective from above leads us to the realization that Gaia is also an individual perception, based in one’s own experiences and stories. Thus the view at 1.7 meters, inside your eyes, can be equally enlightening. Individuals of our kind must hear someone else’s grasp of what we are doing – another person’s experience – to have an understanding of our own conscious experiences and appreciation of them. It is in our nature as individuals and tribal members, and we must share stories to create the value of communities.

We are part of the Earth, embedded in its systems just as is any stone, tree, bird, elephant or cheetah you could ever choose as an example. Here are some stories and scenes from my view. As I write this after awakening on a bright sunny, windy, southern California morning, it is clear to me that the best way for our kind to sustain ourselves in joy is to acknowledge Gaia’s past. We must recognize who we are and our place here, while at the same time standing and walking in our joys connected to the Earth. Having seen the past and future, the evidence that there is no other good choice is as clear as an untouched alpine lake at 3,600 meters.

But my opinion about Gaia has only one-7 billionth the impact of how we do things together. And when you consider the effects of synergy, our collective visions and actions will either sink or carry us. We usually have choices, and often get only what we accept. Of course, we are in different bodies for many good reasons, like neighbouring trees in a beautiful, still and scented forest. But our shared visions and futures can be remarkably complementary when we choose together. To see Earth most clearly, what it is and where it is bound, you have to cultivate your joy in the natural world, in your seen and unseen connections to it. If you want to preserve Earth and your friends in other countries, there is nothing more complex to be done than that and make your voice count. Earth must be held sacred for us to prosper.

No magical power will descend in spheres of light from the sky and solve our environmental problems with science, consciousness or development. Will a belief and faith in some higher power help? Perhaps. Yet, although I stand in downward causation, I would also place my faith in a planet of compassionate atheists who would not control everything and instead work within the boundaries of a Gaian awareness.

We are still struggling to realize that science will not solve everything, because it is only an expression of our values. Science is just a method with its means applied through our wishes, not a god of truth to be worshipped. Most of the brilliantly conceived environmental science we have done in the last 200 years has not amounted to a handful of magical beans. Otherwise, the myriad changes we have made to the Earth would have already been solved. There will always be important exceptions, such as when we reduced the problems we caused with chlorofluorocarbons and ozone. But most of our scientific values and efforts have tipped us toward the money of Franken-science, or red herrings such as GMOs and fluorescent mammals. We have often made choices which fail, and we still spend time and money wondering how we can colonize the Moon or other planets,

while problems mount Earthside. Our values and actions are what solve problems, not priestly scientists.

In spite of all the games we play with ourselves and each other, we do understand what is going on and what our options are. We have choices and we enjoy exercising them. We are conscious of them as we take our risks to feel alive. Many of us would say that choices are one of the biggest reasons we show up here. And you? Each of us sees slightly different choices for ourselves. By nature, synergistic effects always ensue, which in turn magnify into manifold futures we make on our little planet. Our choices, futures and pasts eventually become about the time we have to spend doing or ignoring them.

*We shall never cease from exploration / And the end of all
our exploring / Will be to arrive where we started /
And know the place for the first time.*

T.S. ELIOT

TIME AND CONSCIOUSNESS

One feature of a Gaian consciousness – one connected to Earth – is that you realize time must be factored into your awareness. Time has been a natural experience of our consciousness on Earth and in Gaia. Do we have time to change ourselves so we can be a part of planetary change? Can we make time to manage our own power? These days you don't need a scientist, politician or talk radio host to answer that for you.

Time is often called the action of consciousness upon itself. Yet, is it not curious that an altered or elevated state of mind makes us feel as if

time does not exist? Many who appreciate Earth feel an inexplicable, timeless, mysterious and mystical connection to it. Time and space are thus vital to our understanding of how we change Gaia, and how it changes us. My personal experience of time and space inspire in me awe and respect. Our kind can see and feel past the boundaries of our skins, forward into the future or backward, from where we came. I am but one of millions who feel this and you can find us on every continent.

If the Robin's nest in the Birch tree outside your window is not something that interests you, then

you will be absent the concept that it is in your sphere of influence, or you in theirs. It would as if the Robin's nest or Birch tree were an illusion. You would feel as if observers like Rachel Carson never existed or affect you. But in fifty years I have already witnessed uncomfortable changes as they happen. We are a species with much more power over time and space than we usually suspect. Over time, what will humankind actually do in Gaia? Will we do only the life-affirming, compassionate acts, as would suggest a researcher in consciousness¹⁴?

As a vastly powerful group of conscious organisms making daily choices, it is romantic to imagine we will preserve the planet intact for millennia to come. For those paying attention, that is not a sure thing. It is going to be a close shave. Phoning us from Brazil during government policy meetings, renowned biologist Thomas Lovejoy III, remarked on Blue Planet Almanac radio that he expected we could lose 1/4 to 1/3 of all species on Earth from anthropogenic change¹⁵. Some scientists quote larger percentages. Texas farmer and environmental author, Eric Herm, remarked

that corporate agriculture has reduced the nutritional value of our food by 30% to 70% in the past 50 years¹⁶. We have heard many facts and predictions such as these.

So, then, what time are we willing to spend learning and working on compassionate environmental considerations? In FIGURE 2 is

Search Word	Result	Search Word	Result
book	34,454,521	plant	158,358
science	2,265,259	earth	155,475
business	2,037,630	spirituality	153,406
United States	1,430,926	United Nations	152,878
world	1,307,888	energy	148,883
children	1,264,969	air	135,936
religion	798,193	natural history	128,130
government	514,749	environment	121,444
war	439,573	peace	74,706
Europe	350,167	climate change	58,532
animal	275,641	bees	20,927
nature	275,505	sustainability	11,698
food	218,775	biodiversity	6,858
water	200,452	compassion	3,948
agriculture	166,022	GMO	818

FIG. 2 - Word search results in "books" at Amazon.com, April 2012.

a simple snapshot of what self-actualized Americans are willing to read: from the same website, Amazon.com, where I searched the word "Gaia" in books, I also searched the other words shown in the table. The numbers in the table show the search results for each word.

In a world with key challenges in sustainability, which include water, food, air, climate change and peace, you can see what people are willing to pay to learn about. Sustainability and compassion are literally at the bottom of our list of interests. Science and business are at the top. Would you think that searches of your own nation's favoured book site would yield similar results?

Will you act about, or react to this? Could you create a figurative, symbiotic virus containing your positive choices, which over time infects those with whom you come in contact? You can either surrender your future to visions like those in the Hopi prophecies, or grasp each moment and change your small part of the future. No matter who claims to predict the future, none of us are omniscient. However, as a group, as a tribe of animals with reflective consciousness— we appreciate exactly what is happening, sometimes even before it comes to our conscious awareness. Roger D. Nelson’s remarkable Global Consciousness Project verifies that¹⁷. What will you choose today? What is in your grasp and power? How can you make your voice and actions heard?

... So Below

As the wind blows blissfully outside, I am writing these examples in the hopeful possibility of our joyful futures together. It is impossible to take mankind out of Gaia, or Gaia out of the man. You can appreciate that from 15,000 meters above the Earth, but, now flash down to 1.7 meters, at eye level. Let us acknowledge our individual and smaller tribal experiences. Our daily choices are made as individuals, and lasting change starts there. In this, it would be helpful to share my perspective and stories; I affect what you do, as you affect me. I will write to you now as if I were sitting with you.

These days I am often seen in a blazer, tie and slacks. Yet, as a child, I loved Earth rhythms because they felt “right” and I knew no other context for my most mystical experiences of life. I still feel intimately connected to Gaia – frequently, beautifully, timelessly and inexplicably. I feel and see consciousness and reflections of Gaian awareness in animals, plants and even stones found in the natural world. Words fail in such descriptions, as they might fall short in describing subatomic quantum theories. My direct experience of Gaia succeeds. But a famous outdoorsman like Ansel Adams, Earth advocate like Wendell Berry, activist like Petra Kelly, or American Lakota Indian medicine man like Archie Fire Lame Deer I will never be. In Lakota parlance many Earth-lovers would call me a *wasi’chu* – someone who takes the fat.

So I do not feel special or like the only one who feels this way. Indeed, it is more the opposite, I feel mysteriously and vastly connected to all who have been among us. I even have a fondness for the idea of genetic memory associated with Jung’s collective unconscious, wherein you have access to what is in the past, present or future. In such a moment you are less connected to your own, individual mind, but can

also appreciate your place in our kind’s shared experiences. And, none of our experiences will change our 200,000-year history on this tiny planet.

For most of that time, many if not most of us lived within Earth rhythms. Oftentimes we feared we had no other choices, but it is equally true that our many forebears celebrated and revered the mysteriously beautiful processes of nature. Over the millennia, we have grown bolder and less connected. Now, many of us think we are beyond and above our first nature. Of course, that is impossible.

Here is an example of a seemingly ineffable, beautiful and mysterious, but utilitarian fact about Gaia. Approximately 32 years before James Spottiswoode discovered the Local Sidereal Time effect¹⁸ and geomagnetic effect on parapsychological experiments, in childhood I occasionally noticed there was a curious, daily 90-minute period. Particularly in the summer as I would go walk-about in my town, my intuition during those times was especially acute. I could not explain it and as a child never discussed it with anyone. But I still used it. The daily location of this time period seemed to move with the seasons, so it never occurred to me that it was a repeatable phenomenon. Now, I understand that is because Sidereal days are about four minutes shorter than Solar days. I was sensing both Sidereal time and Earth-local geomagnetisms.

Today, I appreciate Spottiswoode’s discovery to mean this: 30 minutes either side of 13:50 hours Sidereal time, *while* the Earth’s magnetic fields and solar winds are calm, he showed that experiments or actions based in intuition stood an astronomically higher chance of success. Schwartz discusses this in his 2007 survey book of research in consciousness, *Opening to the Infinite*¹⁹. This phenomenon means our intuition is often stronger and more accurate at those times. Such an experience has big implications and use. Through consistent intuitions and experience, through time and space, I have discovered that our consciousness never stopped at the boundaries of our skins, and never will. No one knows exactly how this happens. But I can tell you why: I am embedded in Gaia, as are you. We grew up here, and it makes perfect sense that we would have capabilities most of us have forgotten.

These days I keep a sidereal clock on my desktop computer, my smart phone and my tablet computer. These are means to remind the suburban me that I live in a skin, on a tiny planet – the only one known of its kind – in an even thinner envelope of life.

I grew up like anyone else in a middle-class southern California neighbourhood. Around the age of five, I discovered the transcendent effects of southern California’s adiabatic *Santana* winds on my mood. Santana

winds sometimes gave me sniffles from allergies, but without fail they also made me see and feel across town, or halfway around the Earth. Forty years ago, most reputable, Occidental psychologists would have told my parents I was crazy in the coconut. These days there is more of a tendency in popular books and among educated souls to honour such an experience. There is at least one nonfiction book which discusses a possible mechanism how the Santanas affect people, *The Ion Effect*, by Soyka and Edmonds²⁰. Now, you will instead find police and fire battalion captains who would verify, *sotto voce*, that Santanas change people's moods.

Wind still has this enlivening effect on me, and this morning as I write I find the cold Northers irresistibly, joyful and exciting! They are quite powerful and compel me to get up and go walkabout out of doors. Thoreau wrote about the sound of wind in the trees, "*The Earth is our ship, and this is the sound of the wind in her rigging as we sail.*"

On childhood vacations, my family often did tent camping in California's Sierra Nevada. At seven I caught my first, wild Rainbow trout in Dorst Creek, in the United States' Sequoia National Forest. I reeled it in although I was scared of its newness and tiny, sharp teeth.

But there were also times when I understood things, via perceptions which few adults wanted to acknowledge or discuss. When I was around 10, I remember "talking" with our much older 16 year-old neighbour, Gary. He was sometimes scary because he often wore a frown, was twice my size and moved very fast – and jerkily – without fluid motion. But there seemed to be a kind quality about him because of the compassion provided to him by his social experience. To most everyone, adults and children alike, his speech was unintelligible as he was an Rh child. I remember his mother's quiet surprise that I was able to understand him. That experience is just one among hundreds of millions other people's, and such examples are available to any of us as part of our Gaian heritage. Our abilities and mysterious embedment in Gaia can begin a humbling process that there are forces vastly greater than oneself.

In Little League baseball, I batted over .300 and was average at fielding. Our coach would station me in right field so the busier left field would be better covered. But, regularly I caught and brought home lizards, butterflies, moths, grasshoppers, beetles and an occasional snake or field mouse. I met them in



FIG. 3 - South American Leaf beetle (*Polychalca punctatissima*), Sarefo, 9-2007.

the many beautiful avocado, lemon and citrus groves in our foothills, in addition to riverbeds and chaparral. By 11 years of age I knew most local animals and plants by name. Sometimes I captured my guests with a slip-noose from the supple tip of fresh, wild oat grass, an invasive species common by my home. My guests visited the terrarium in my room, and were later released.

At age 13, my insect collection for secondary school biology contained a broad range of examples. The usual locusts, moths, a butterfly and a stinkbug were present. But the two dazzling prizes were a beautiful, astonishing Virgin Tiger moth, and a fluorescent, emerald green tortoise beetle from South America. My maternal grandfather collected four such Leaf beetles in 1917 as a merchant seaman, from Argentina or Brazil. This Leaf beetle's scientific names are *Polychalca punctatissima* or *Desmonota variolosa*, and they are sometimes made into jewellery.

Surrounded by chaparral, fluorescent moonlight and gravestones, at 13 I shared my first kiss with a "much older" girl of 15, in the tiny cemetery of Álamos, Sonora, Mexico. At around 15 my father made

an open-air, outdoors cage, which housed my American Kestrel, clad in jesses. After we got driver's licenses, two of my favourite friends and I went to a Barn owl's nest and I brought home an eyass. One of those friends became a field biologist and painter, the other a teacher in secondary schools.

Before mobile phones and with medical assistance at least two hours' drive away, at age 17 I held a wild Mojave sidewinder, entranced by his nature. Later, etched on my awareness was the sight of my biologist-to-be friend crouched - with his camera covering his face - only 90 cm from another, coiled-to-strike, softly rattling, wild sidewinder. My friend's church-going Catholic mother was also a closet psychic, who had an experimentally verified knack in predicting the fall of cards from behind a leaden screen. She once quietly acknowledged to me her son's ability to calm animals. It was in contexts like these that I grew up, with a soft realization I am a smart creature fuelled by instinct, like any other animal embedded in an ecosystem. I depend upon the Earth for my livelihood and joys.

In my 20s I began meditating using methods from Asian traditions, learning better how to calm myself. Many of the experiences Patañjali described in the third book (*Vibhuti Pada*) of the *Yoga Sutras* began occurring for me. It was because of meditation, fifteen years before I ever met them or knew who they would be, I saw my wife-to-be and son-to-be. I

knew their complexions, builds, hair colour and saw my son's eyes. I knew where my wife had grown up and that ours would be a quickly-paced, very challenging and often productive relationship. At first these suspensions of time and space scared me and I did not believe they were plausible, let alone possible. Of course, I am not the only one with experiences similar to those. Any shaman or spiritual teacher would say there are many of us, as would Chumash teacher Kote Lotah. It was from the podium of the International Remote Viewing Organization's 2007 conference, that Stephan A. Schwartz spoke this in his extemporaneous keynote address:

"[...] there are over 2,000 studies about nonlocal perturbation, in the form of what's called 'therapeutic intent research' – that is, consciousness of one person affecting the well-being of another. And there are a similar number of studies involving things like Ganzfeld, which is a sort of first cousin of remote viewing, remote viewing (itself), the creativity research, the near death studies research. So there's a large body of material. We actually do know a few things about this... there are a few things about which most researchers who do this work at a very rigorous level do agree with. The first thing that I think most researchers in this area would agree with is that there is incontrovertible evidence for the acquisition of information which could not be explained by normal sensory intake. Another thing that we agree on, is that there is... some aspect of consciousness exists outside of time-space [...] The problem, of course, for those people who are critics, is that precognition ought not to exist at all, particularly precognition which extends out in time²¹."

Because we have suppressed our skills, heritage and histories, we regularly forget who we are and where we came from. When you suppress what you feel and see, you make yourself sick in body and soul. It is vital to remember our heritage through stories, and that we all share capacities and skills that can just as easily be acknowledged and honoured. Thereafter, conscious choice frequently evolves into supra-consciousness, whereby we feel connections with all things on Earth, alive or inanimate. It would make sense there at least a hundred million Earthlings, more than 1.4% of us, who believe consciousness extends far beyond the boundary of our skins, and that it was never limited to the local space between our ears.

One of the ancient, Indian variations on this idea might be the aphorism, "What is here is elsewhere. What is not here is nowhere." And for those of us who do not subscribe to that, many others of us are

fond of popularized scientific theories like Edward Norton Lorenz' 1969 "Butterfly Effect," a construct of chaos theory wherein a tiny change in a nonlinear system is theorized to have a later, massively greater effect at different time. The popular alternative rock band, Muse, even have a 2004 song titled, "Butterflies and Hurricanes."

LOCALIZED HISTORIES AND TIMES

We are at least our consciousness of our place on Earth, and certainly nothing less. We are not our experiences, but more our understanding of them, as would say Richard McCann²², whose mother was taken by the Yorkshire Ripper.

The fact is that our world does have a past, present and future. We live in our sense of it, and our moment has worn thin. People claim any feeling or reason to justify whatever they want. No one is going to make anyone do otherwise simply because someone, some environmental NGO, or some national government asks them. On your own, when

you feel like it, you must decide for yourself to live the way you find most honourable and joyful. Repeated millions of times across Earth in past decades in regional land and population developments, our history is crystal clear from examples worldwide. Let us stand back by looking through one person's examples of this.

There is a small semi-rural municipality 60 miles northwest of Los Angeles, Santa Paula, CA. When European settlers first arrived in this region where I grew up, they often remarked about the vast, beautiful, tall fields of yellow-flowered white mustard. Pedro Font, a member of Juan Bautista de Anza's 1776 expedition noted a massive herd of now locally extinct Pronghorn when they arrived:

"[...] there was a fairly large village whose Indians had fish, because it is near the sea; and on the river there were many geese, ducks, cranes, and other fowl. We saw in the plain a very large drove of antelopes which, as soon as they saw us, fled like the wind, looking like a cloud skimming along the earth²³."

It is surmised that a now-extinct American cheetah could have been the Pronghorn's main predator, although occasional Puma sightings are these days mentioned in the Pronghorn's former range. The vast fields of wild mustard have since been replaced by a town, industrialized agriculture, housing developments, a small airfield and mostly-unobtrusive oil wells. The massive



FIG. 4 - South Mountain, Santa Paula, CA.
Along the mountain's base flows the Santa Clara River.

[Author].

and recently subsumed USD 8 billion (annual revenue) petroleum company, Unocal, was founded in Santa Paula. Santa Paula, California's principal commerce around 1970 was in citrus, avocados and the daily automobile commuting of its 14,000 residents to nearby municipalities. Its commerce is roughly the same today. Twelve miles away lay the fertile, alluvial farming plains of Oxnard, which fed much of America for many years. More and more housing developments now cover Oxnard's once fertile land. Industrialized agriculture has depleted Oxnard's soil, putting back into it only three among hundreds of vital nutrients.

Wherever you grew up or now live, there are parallel natural and social histories that will share many elements of the thumbnail sketches in time you just read. Human kind multiplies or prospers by nature, tries to turn nature to its own liking, and promotes massive ecological changes which can only be repaired with diligent, reverential attention. There is no way to sugar coat this. We are a ubiquitous, destructive, acquisitive and sometimes violent species and those traits run throughout our family. We can also be so tender we are inspired to compassion and acts of surprising kindness or understanding.

Are there still ways we can peacefully coexist with the natural world, with Gaia? Yes. We have choices. People's individual and collective values, expressed in their beliefs and daily lives, are what move them to action or indifference. Who we are is actually straightforward and simple. Regardless of our spiritual beliefs, we are still animals with souls. Most of us crave that which engenders the strongest feeling of being alive. All of us are built for ecstasy and seek it daily, as would any other creature. Many of us try to balance that craving with our self-actualization, by having families, careers or little adventures.

But, would you say it is likely that no culture, people or coalition of governments will have an easy time stopping Japan from decimating wild whale and dolphin populations? Or, can we bring

selfish America or explosive China to the bargaining table about anthropogenic climate change? Recently, a friend who visited China for two weeks said she saw the Sun only once. Constant smog blocked it. Can the rising powers of Brazil be convinced that massive hydroelectric projects are not worth the tradeoff against worldwide carbon-sink capacity? The Japanese could stop Japan. Americans can opt to be compassionate and connected. Brazilians can halt hydroelectric projects any time they choose. But they first have to be conscious of those things, and want them. They have to be connected to their Earth. They have to feel like they want that and take action.

In the early 1980's I interviewed respected Lakota Sioux medicine man, Archie Fire Lame Deer, for my university's newspaper. He said that a "roll-back" of North American and world attitudes was imminent. He meant there would be a new appreciation of consciousness about how our kind had formerly gotten along with Earth, and said the change had been brewing for a long time. He spoke confidently, as if such a change

was inevitable, and as if it would be sooner, rather than later. Thirty years on, it looks like what he had seen was true. In the moments I listened to him, I had no clear conception of our future. I only knew our general direction. In my happier moments, I then decided it was still possible to have areas of Earth which were pristine and remained outside our influence. Time and history suggest the actualization of my hope is not clear.

A W A K E N I N G S

In North America, in recent years it is frequently said by self-actualized sorts that humankind is undergoing an awakening. Lots of people aspire to greater consciousness in environmental, social and developmental matters. They visit their local metaphysical bookstore, or gravitate toward other students of their favourite teacher in consciousness for camaraderie. From the perspective of 30 years, there have never been more schools for personal development or consciousness in the US, nor



FIG. 5 - Santa Paula Creek, Santa Paula, CA.
A tributary to the Santa Clara River. [Author].

more boulevard or telephone psychics. Famous teachers from the prior generation have already ordained their own students, many of whom have emerged as household names for goodness, at scales environmentalists or social progressives would only hope to achieve. Barbara Brennan and Deepak Chopra come to mind. NASA atmospheric physicist Brennan was a long-ago student of Rosalyn Bruyere's mystery school. Endocrinologist and professor Chopra was one of Mahesh Presad Varma's (aka Maharishi Mahesh Yogi) right arm operations people in founding the American Association of Ayurvedic Medicine, and the Maharishi Ayurveda Health Center for Stress Management and Behavioural Medicine.

These days it is often easier to openly acknowledge an important aspect of our consciousness, our intuition, than thirty years ago. In the US, it seems every third parent of a sensitive child dubs them an "Indigo." And indeed, it seems that more children of sensitivity are being born. Among friends, anecdotes about their child's precognition or clairvoyance are not uncommon. It is in our nature to have subtle perceptions and skills our kind has developed over 200,000 years of practice.

For example, a multilingual Parisian expat friend, Tania Frank-Stappard, attends informal classes in consciousness, and will pass along what she has learned to her children. If you live in Europe and have watched US produced feature films dubbed in German or French have probably heard her voice. Regular evidence of social behaviours in consciousness is reflected in American activities across the Internet and around the world.

But it can easily be shown from the air there seem to be tendencies for humankind to remain somnambulistic about our true reach and roles. For all of our global reach, part of our coping strategy as individuals is to have a remarkable talent in diminishing or ignoring the consequences of what we do. It is how we are built and how we have survived. Our modern world is built upon massive repetition found nowhere else in nature. We are a species which has preferred the often false security of monocultures.

One can see, for example, hundreds of kilometres of smoke filling the sky from the burning of millions of

acres of rainforest, exacerbating climate change. We still vaporize rainforests into monoculture palm plantations, which are then transmuted into consumer products, like snack foods and cosmetics which are sold worldwide. The true scale of the 2010 Gulf of Mexico oil tragedy was measured very accurately with satellite images from a nonprofit, SkyTruth, before the US government or BP would ever admit to the disaster's real scope.

There are environmental organizations like Rainforest Action Network which strive to give our activities a conscience. Yet, most "conscious" North Americans, and many of us in other countries, have never heard that climate change is being gleefully sold to us in our biscuits and shampoos. We have developed our daily mouse trails and willingly forgotten our Gaian, planetary beginnings and endings. Most conscious Americans would be unable to identify the name or mission of the United Nations Environment Programme, or to have heard that their favourite European retailer in America, IKEA, was in March 2009 UNICEF's largest corporate partner in their history²⁴.



FIG. 6 - Looking Northwest across Santa Paula, from South Mountain. [Author].

Our values and actions are given form, and embodied by our consciousness. We have the option to change, and we need to. Our time is best spent by embracing who we are and living here instead of trying to escape our nature. Regardless of who or where you are in our life, our consciousness of environmental concerns show in our daily actions of making a sustainable future possible for our children or family. We could be a wealthy media magnate, or a researcher in nonlocal consciousness, or a single, working parent of three school-aged children, or our roof could be a cardboard box beneath an expressway, or a Sky-clad Jain monk on the Ganges. Virtually *all* of us understand what is happening around us in our own way, and that our effects as a species on our home go far beyond that which is visible. We could ask anyone on the street about environmental concerns, and they will have at least some idea of what is going on. Many of us have deep understandings.

We can cite a list of problems we have created. Most of us now agree that many of our environmental choices were shortsighted. Farmer, policy expert, author and environmentalist Lester R. Brown believes that

civilization will only be saved if we, “[...] *move at wartime speed*”⁵. It was for that reason there have been many times when some of us were inclined to be activists. Activism has a place in the pantheon of desirable human behaviours. Sometimes people are shocked into action with violent figures, sobering facts or sad-denying images because they literally did not know what was happening. In their early stages, activism often involve subtle coercion. Coercion leads to feelings that you would like to change your mind and do something else. After the initial shock wears down, true change comes only from feeling like we have “our own” choice available to us. Coercion and shock have limited utility. Otherwise the philosophy in Garrett Hardin’s *The Tragedy of the Commons* would have become much more popular. True sustainability is instead based in conscious choice.

The only reasonable solutions in sustainability involve individual choices, repeated on individual scales, billions of times each day. Sustainability comes down to consciousness of our embedment in living systems. What will we choose? How will our voice be heard through our daily actions, and with whom will we share our knowledge and stories? The more we live and learn, the more we find that we are inextricably entwined with Gaia. Individual, daily choices will, expressed in the consciousness that we are part of something vastly bigger than ourselves, will save our home. ◉

¹ Austin 2009, “Blue Planet Almanac”.
² Philpott 2010, “Leaked document shows EPA allowed bee-toxic pesticide despite own scientists’ red flags”.
³ US Supreme Court 2010, “Citizens United, Appellant v. Federal Election Commission”.
⁴ Clements 2012, “Rights Are for Real People”.
⁵ Schwartz 2010, “The Schwartz Report”.
⁶ Schwartz 2012, “Explore”, 9-11
⁷ Wolf 2012, “How the US uses sexual humiliation as a political tool to control the masses”.
⁸ Turly 2012, “10 reasons the U.S. is no longer the land of the free”.
⁹ Bewig 2012, “Why Does the U.S. Have Such a High Infant Mortality Rate?”.
¹⁰ Harrison and Pearce 2001, *AAAS Atlas of Population and Environment*.
¹¹ Lovelock 1974, “Atmospheric homeostasis by and for the biosphere: the Gaia hypothesis”.
¹² Wikipedia 2012, “New Age Gaian”.
¹³ Long Now Foundation Website 2012.
¹⁴ Schwartz 2011, “Remote Viewing and Intentional Healing”.
¹⁵ Lovejoy and Austin 2009, “Blue Planet Almanac”.
¹⁶ Herm 2012, KTLA-TV.
¹⁷ Nelson 2002, “Coherent Consciousness and Reduced Randomness: Correlations on September 11, 2001”.
¹⁸ Spottiswoode 1997, “Apparent Association Between Effect Size in Free Response Anomalous Cognition Experiments and Local Sidereal Time”.

¹⁹ Schwartz 2007, *Opening to the Infinite*: 99.
²⁰ Soyka and Edmonds 1982, *The Ion Effect*.
²¹ Schwartz 2007, “Opening to the Infinite” address.
²² McCann and Askew 2011, “A Glimpse of Reality”.
²³ Font (1767), “Diary of Pedro Font”.
²⁴ Barner and Austin 2009, “Blue Planet Almanac”.
²⁵ Brown 2009, *Plan B 4.0: Mobilizing to Save Civilization*: 193.

REFERENCES

- ASKEW, N. AND MCCANN, R. (2011), “A Glimpse of Reality” film, Soul Biographies, <http://soulbiographies.com/?s=richard+mccann&x=0&y=0> [accessed 19 May 2012].
- AUSTIN, M. (January 2009 to March 2011) “Blue Planet Almanac” talk radio, HealthyLife.net, <http://blueplanetalmanac.wordpress.com/podcasts/> [accessed 19 May 2012].
- AND BARNER, M. (10 March 2009) “Blue Planet Almanac” radio interview, HealthyLife.net, <http://blueplanetalmanac.wordpress.com/podcasts/> [accessed 19 May 2012].
- AND LOVEJOY, T. (2 February 2009) “Blue Planet Almanac” radio interview, <http://blueplanetalmanac.wordpress.com/podcasts/>.
- BEWIG, M. (8 April 2012), “Why Does the U.S. Have Such a High Infant Mortality Rate?”, *AllGov.com*, http://www.allgov.com/Top_Stories/ViewNews/Why_Does_the_US_Have_Such_a_High_Infant_Mortality_Rate_120408 [accessed 19 May 2012].
- BROWN, L. (2009). *Plan B 4.0: Mobilizing to Save Civilization* (New York: W.W. Norton & Co.).
- CLEMENTS, J. (Spring 2012), “Rights Are for Real People”, *Yes! Magazine*, 61 (9) Strategies to End Corporate Rule, <http://www.yesmagazine.org/issues/9-strategies-to-end-corporate-rule/rights-are-for-real-people> [accessed 19 May 2012].
- FONT, P. (1767), 23 February 1776 entry of the “Diary of Pedro Font” from the Juan Bautista de Anza Colonizing Expedition. University of Oregon, <http://anza.uoregon.edu/Action.lasso?-database=fontex&-layout=standard&-op=eq&pg2=148&-response=format/fontexpg2fmt.html&-maxRecords=1000&-noresulterror=/sorry.html&-serach> [accessed 19 May 2012].
- HARRISON, P. AND PEARCE, F. (2001), *AAAS Atlas of Population and Environment* (Berkeley: University of California Press). <http://atlas.aaas.org/index.php?part=2> [accessed 19 May 2012].
- HERM, E. (2 February 2012). KTLA-TV Los Angeles interview, <http://blueplanetalmanac.wordpress.com/2012/02/14/son-of-a-farmer-child-of-the-earth-video/> [accessed 19 May 2012].
- LONG NOW FOUNDATION (2012), Website home page, <http://longnow.org/about> [accessed 19 May 2012].
- LOVELOCK, J. AND MARGULIS, L. (1974), “Atmospheric homeostasis by and for the biosphere: the Gaia hypothesis”, *Tellus* XXVI (1-2), <http://onlinelibrary.wiley.com>

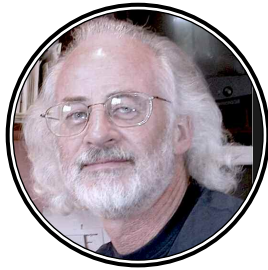
- /doi/10.1111/j.2153-3490.1974.tb01946.x/pdf [accessed 19 May 2012].
- NELSON, R. (2002), “Coherent Consciousness and Reduced Randomness: Correlations on September 11, 2001”, *Journal of Scientific Exploration*, 16 (4): 549–570.
- PHILPOTT, T. (11 December 2010), “Leaked document shows EPA allowed bee-toxic pesticide despite own scientist-s red flags”, *Grist*, <http://grist.org/politics/food-2010-12-10-leaked-documents-show-epa-allowed-bee-toxic-pesticide> [accessed 19 May 2012].
- SCHWARTZ, S. (2007). *Opening to the Infinite* (Buda, Texas: Nemoseen Media).
- (2007). “Opening to the Infinite” Keynote Address, Proceedings of the International Remote Viewing Association Convention.
- (27 September 2010) “Billionaires Give 91 Percent of Funds for Rove-tied Group”, *The Schwartz Report*, <http://www.schwartzreport.net/showarticle.php?id=7894> [accessed 19 May 2012].
- (January 2012) “The Perfect Storm, The Rise of Localism, and its Effects on National Wellness”, *Explore: The Journal of Science and Healing*, Vol., Issue 1, <http://www.explorejournal.com/article/S1550-8307%2811%2900303-X/fulltext> [accessed 19 May 2012].
- AND TARG, R. (28 August to 2 September 2011), “Remote Viewing and Intentional Healing,” Omega Institute course SM11-4205-708, Schwartz’ comments from the podium, Rhinebeck, NY.
- SPOTTISWOODE, S.J. (1997). “Apparent Association Between Effect Size in Free Response Anomalous Cognition Experiments and Local Sidereal Time”, *The Journal of Scientific Exploration*, 11 (2).
- SOYKA, F. AND EDMONDS, A. (1981). *The Ion Effect* (New York: Bantam).
- TURLY, J. (13 January 2012), “10 reasons the US is no longer the land of the free”, *The Washington Post*, “Outlook & Opinions”, http://www.washingtonpost.com/opinions/is-the-united-states-still-the-land-of-the-free/2012/01/04/gIQAvD1wP_story_2.html [accessed 19 May 2012].





NONLOCALITY, CONSCIOUSNESS, AND THE EYE OF LOVE

RAYMOND TREVOR BRADLEY



A New Zealander and a Fulbright-Hayes Scholar, Dr Raymond Trevor Bradley (PhD with “Distinction” in sociology, Columbia University; post-doctoral studies in neuropsychology and cognitive science with Dr Karl Pribram, Stanford University), has been pioneering the multi-disciplinary application of physics, information science, neuropsychology, psychophysiology and sociology in research to understand fundamental processes of communication – including nonlocal interaction – and group function in social collectives. His basic research has included: a network analysis study of the energy dynamics of stability and change in charismatic systems; a study of holographic social organization; a quantum-holographic theory of communication in social and biological collectives; a holographic model of information processing in goal-directed collectives; studies of the psychophysiological basis of nonlocal intuition; and a quantum-holographic theory of non-local communication – including intuition and non-local agency. His applied research has included: developing an empirically-based model of expert mastery in professional practice; improving statistical methods to detect gender and ethnic test bias; conducting a nationwide study of test stress, emotional management, and academic performance among US high school students, among other projects. His current research interests include: laboratory experiments using electrophysiological measures of autonomic system activity to detect non-local intuition in entrepreneurs; studying the bio-emotional field effects of nonlocal interaction within social groups; studying the energy spectra of vocal interactions to identify a holographically encoded signature of member affiliation in secret social groups; and a pilot study of human-cetacean communication using electrophysiological measurement of heart rhythm activity. Dr Bradley has published five research monographs, a book, Charisma and Social Structure: A Study of Love and Power, Wholeness and Transformation (Paragon, 1987; ToExcel.com, 1998), and more than seventy works from his research. He is presently Director of the Institute for Whole Social Science, and also Chief Scientist and Director of Research, Center for Advanced Research (CFAR), Neuron Dynamics, LLC, Appleton, WI, and Northland, New Zealand. Email: wholesocialscience@gmail.com; ray.bradley@neurondynamics.com .

Philosophy enunciates the world in images of words. It must arise in the heart in order to mediate the world, since, as Corban says, it is that subtle organ which perceives the correspondences between subtleties of consciousness and the levels of being. This intelligence takes place by means of images which are a third possibility between mind

and the world. Each image coordinates within itself qualities of consciousness and qualities of world, speaking in one and the same image of the interpenetration of consciousness and world, but always only as image which is primary to what it coordinates.

JAMES HILLMAN,

The Thought of the Heart and the Soul of the World.

INTRODUCTION

NONLOCAL INTERACTION BELONGS TO A CLASS OF consciousness phenomena that has eluded the light of scientific understanding and has long remained an enigma. Included in this class are intriguing yet perplexing phenomena such as intuition, ESP, clairvoyance, remote viewing, mind-matter/mind-living systems effects, and other forms of nonlocal consciousness phenomena often referred to as *psi*. Although there can be little scientific doubt about the existence of these phenomena (Radin, 1997a), explaining *how* – the mechanisms and processes by which – such space/time-defying interaction occurs has not been possible until relatively recently.

Three scientific developments have opened the door to rational explanation. The first is the discovery of the *holography* – specifically, the principle of distributed organization by which information about an object is spectrally encoded throughout a field of potential energy by the radiating oscillations of energy waveforms. The second is the discovery of *quantum entanglement* or nonlocality – that everything in the universe at the subatomic level is interconnected and nonseparable. The third is the discovery of *quantum coherence* – that subatomic emissions from macro-scale objects are not random but exhibit coherence at the quantum level, reflective of an object’s material organization and event history.

Coupling these developments in physics with recent psychophysiological evidence, on the involvement of positive emotions – *love*, in its broader sense – in nonlocal interactions, provides the key to the door of scientific understanding. Indeed, as Edgar Mitchell points out:

It is likely that most, if not all, subtle, ephemeral and unexplained phenomena associated with subjective experience are connected, directly or indirectly, with the phenomenon of nonlocality. [...] *Nonlocality and the nonlocal*

quantum hologram provide the only testable mechanism discovered to date which offers a possible solution to the host of enigmatic observations and data associated with consciousness and such consciousness phenomena. (Mitchell, 2000: 299; my italics).

In presenting the quantum holographic theory¹ of nonlocal interaction that follows, space limitations permit only the briefest overview of the large body of scientific evidence.

NONLOCAL INTUITION

The Concise Oxford Dictionary (1964: 639) defines *intuition* as “immediate apprehension by the mind without reasoning, immediate apprehension by a sense, and immediate insight.” Such intuitive experience is quite unlike that of normal cognitive awareness, in which the mind’s contents are updated incrementally, as the sequences of sensory experience unfold (McCraty et al., 2004a). While the dominant perspective on intuition is a cognitive approach – that intuition is largely the result of past experience (e.g., Agor, 1984; Myers, 2002; Mitchell et al., 2007; Simon, 1987), there is, however, persuasive evidence for another informational basis for intuitive perception. This is the *tacit* information about remote or future events, encoded in the incoming wave fields of energy radiating from nonlocal objects, perceived and processed by the body’s psychophysiological systems. Such instances of “nonlocal intuition” (La Pira & Gillin, 2006) involve communication of information from a nonlocal source that appears to defy the physical laws of causality and the constraints of space and time. Even so, *nonlocality* – the inherent “entanglement” or interconnectedness of everything in the universe at the quantum level – has been empirically verified, and is now a widely accepted scientific fact in physics (Aspect et al., 1982; Tittel et al., 1998). This physical property of *universal interconnectedness* is a key element for resolving the enigma of such nonlocal consciousness in the quantum-holographic theory presented in summary here².

EARLY RESEARCH

Nonlocal communication is a phenomenon that has been consistently documented in rigorous scientific experiments for more than a century (see Radin, 1997a). The key finding of this research is that individuals are able to accurately perceive information from a distant source or a future event, and that this result *cannot* be explained by researcher/methods artifacts or chance. Moreover, on the basis of results from meta-analyses on the hundreds of studies, involving millions of trials, conducted on three distinct categories of nonlocal

communication – *person-to-person*, *place-to-person*, and *future-to-person* information communication – Radin (1997a) concludes that *the likelihood that an intuitive effect is true, exceeds the certainty of measurement in experiments verifying quantum mechanics – the most accurate scientific description of reality.* To put this in perspective, the odds against chance for the veracity of quantum mechanics are estimated by physicists to be 10¹⁵ to 1 (see Penrose, 1989, or Nadeau & Kafatos, 1999).

RECENT STUDIES – EMOTIONS AND THE HEART’S INVOLVEMENT

Using rigorous experimental protocols and electrophysiological instrumentation, researchers have consistently found that the human autonomic nervous system (ANS) unconsciously responds to randomly selected future emotional stimuli (e.g., Blasband, 2000; Spottiswoode & May, 2003; May, Paulinyi, & Vassy, 2005). In experiments using randomly selected emotionally arousing or calming photographs, Radin (1997a, 1997b) found significantly greater change in electrodermal activity around 5 seconds before a future emotional picture than before a future calm picture. These results have since been replicated (Bem, 2011; Bierman, 2000; Bierman & Radin, 1997; Bierman & Scholte, 2002; Radin, 2004), and a follow-up study, using Functional Magnetic Resonance Imaging (fMRI), found brain activation in regions near the amygdala (involved in the processing of strong emotions, such as fear and rage) *before* emotional pictures were shown, but not before the calm pictures (Bierman & Scholte, 2002).

Augmenting Radin’s protocol with measures of brain response (EEG) and heart rhythm activity (ECG), a recent study found that not only did both the brain and heart receive the pre-stimulus information some 4-5 seconds before a future emotional picture was randomly selected, but also that the heart responded about 1.5 seconds *before* the brain (McCraty, Atkinson, & Bradley, 2004a & 2004b; see FIGURE 1). Corroborating evidence of the heart’s involvement comes from two new studies – one involving random presentation of “pleasant” and “unpleasant” acoustical stimuli, (Tressoldi et al. 2009); the other from an investment experiment on repeat (successful) entrepreneurs, which also found a 5-6 second pre-stimulus result for skin conductance measures (Bradley et al, 2010). In a separate experiment on a sample of non-entrepreneurs who had been practicing positive emotion self-regulation techniques involving the activation of love (appreciation and gratitude) for a decade or more, Bradley et al. (2010) found that the beat-to-beat heart rate measure in the pre-stimulus period predicted the computer-generated random outcome by as much as 12 to 14 seconds.

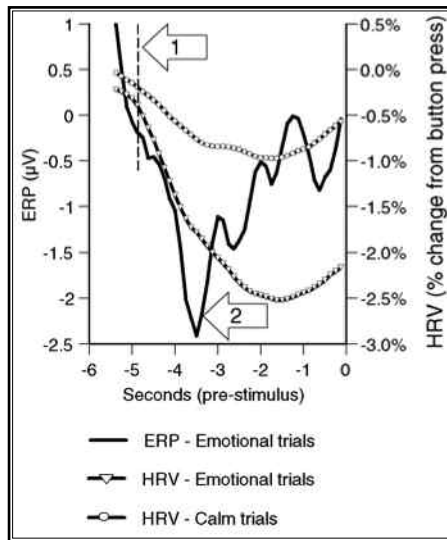


FIG. 1 – Temporal dynamics of heart and brain pre-stimulus responses.

This overlay plot shows the mean event-related potential (ERP) at FP2 and heart rate deceleration curves for the female subgroup ($n = 15$) in condition 1 during the pre-stimulus period. (The “0” time point denotes stimulus onset.) The heart rate deceleration curve for the emotional trials diverged from that of the calm trials (sharp downward shift) about 4.8 seconds prior to the stimulus (arrow 1), while the emotional trial ERP showed a sharp positive shift about 3.5 seconds prior to the stimulus (arrow 2). This positive shift in the ERP indicates when the brain “knew” the nature of the future stimulus. The time difference between these two events suggests that the heart received the intuitive information about 1.3 seconds before the brain. (© McCraty et al., 2004b; reproduced with permission).

The consistent finding from the electrophysiological experiments is that *the body typically responds to a future emotionally arousing stimulus four to seven seconds prior to experiencing the stimulus*. This is well before the long-known half-second or so anticipatory pre-cortical priming of the brain that occurs prior to perception of a normal stimulus (Pribram, 1991).

A final piece of evidence of nonlocal intuition – only this time at the collective level – comes from the output of the Global Consciousness Project’s (GCP) world-wide network of Random Number Generators (RNGs)³ in the hours before the terrorist attacks on the United States on September 11, 2001. Initiated by Roger Nelson in 1998, the GCP investigates the correlation between global events of mass consciousness and periods of non-random order generated by the RNGs (Nelson, 2002). Independent statistical analyses of the RNG output in the hours *before* the terrorist attacks took place, suggest that there was *implicit global foreknowledge of the imminent terrorist attacks some ‘three to four hours before’ the first*

plane crashed into the North Tower of the World Trade Center at 8:45 a.m. (Nelson, 2002; Radin, 2002; see FIGURE 2). This nonrandom pattern of RNG output ($p = 0.0005$, for September 11 versus $p \leq 0.05$ for all other days in September) could *not* be explained by artifacts such as electrical disturbances or high levels of mobile phone use⁴.

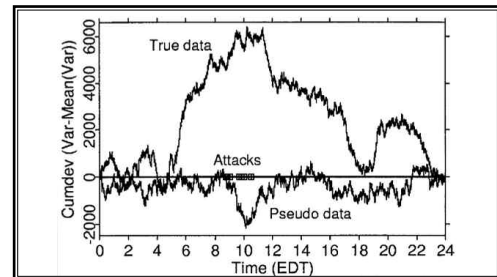


FIG. 2 – Cumulative deviation of variance across EGGS (RNGs) for each second on September 11, 2001.

Times of the separate events in the terrorist attacks are marked with rectangles on the zero line. The curve labeled “Pseudo Data” shows a control calculation using a pseudo-random clone data set for each day (From Nelson, 2002, FIGURE 3; reproduced with permission).

The important conclusion from the evidence is that intuitive foresight is related to the degree of *emotional significance* of an event to the percipient. Also, that instead of evidence of a new so-called “sixth sense” or subtle nonlocal information pathway directly into the brain (Bernstein, 2005), the research shows that known, familiar physiological structures are involved (brain, heart, and ANS), and that the body appears to process intuitive information in the *same way* it processes ordinary sensory input (McCraty et al., 2004b).

A QUANTUM-HOLOGRAPHIC THEORY OF NONLOCAL INTUITION⁵

To develop an understanding of nonlocal intuition, I draw on three key scientific developments. The first is the discovery of the *hologram* – specifically, the principle of distributed organization by which information about the organization and properties of a whole (an object or event) is spectrally encoded throughout a field of potential energy to all points and locations by the radiating oscillations of energy waveforms (Gabor, 1948). The theory that follows utilizes the principles of a special kind of holography – *quantum holography*, discussed momentarily.

The second is the empirical discovery of *quantum entanglement* or nonlocality – that everything in the

universe at the subatomic level is interconnected and nonseparable (Aspect et al., 1982; Tittel et al., 1998). The third is the discovery of *quantum coherence* – that subatomic emissions from macro-scale objects are not random but exhibit coherence at the quantum level, reflective of an object’s material organization and event history (Schempp, 1992). Coupling these developments in physics with the psychophysiological evidence on the involvement of mental attention and positive emotions – *love* – in nonlocal interaction provides a key to the door of scientific understanding. I am using the notion of “love” in the broader sense – of a healthy narcissism that enables the individual to focus attention on other objects than the self (Piaget, 1983). As we will see, the experience of positive emotions, like love and appreciation, generates a sine wave-like pattern of heart rhythm activity – wave field of coherent bio-emotional energy – that radiates outward from the body in all directions.

HOLOGRAPHIC THEORY⁶

The appeal of holographic theory (Gabor, 1948) is the explanatory power of its principle of distributed organization as the information-communication mechanism for nonlocal interaction. Because it is possible to retrieve information about the object as a whole from *any* point or location within the field, holographic theory, with its basis in the linear mathematics of the Fourier transform function, has been postulated to provide a reversible physical mechanism by which intuitive information can be encoded, transmitted, received, decoded, and perceived (e.g., Bohm, 1980; Laszlo, 2003; Mitchell, 2000; Tiller, 1999, 2004).

Creating a hologram requires two sets of waves – a set of object waves and a set of reference waves. The object wave is directed towards the object. It encodes intensity changes and phase-shifts reflecting the features of the object as the wave interacts with the object, and is then emitted away from the object in all directions⁷. When a reference wave is directed back towards the emitted object wave, it interacts with the object wave and creates an interference pattern that records the phase-shifts of the object wave relative to the reference wave. In short, it is the interference pattern that encodes the phase-shift information from which a 3-dimensional image – a *holograph* – of the object can be reconstituted in space-time, via a Fourier transform function (Gabor, 1948). FIGURE 3 presents a simple demonstration of the holographic effect with a slide projector.

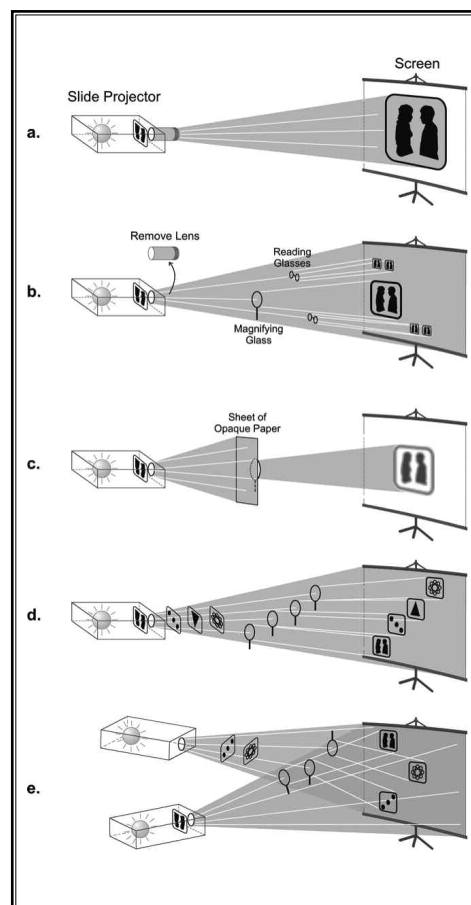


FIG. 3 – Illustration of a holographic effect using a slide projector.

The normal setup for a slide projector a) is shown first, with the image of a slide projected by the light emitted from the light bulb through (and focused by) the lens onto the screen. In b) the lens is removed, so that the light passing through the slide appears on the screen as “white” light; no features or image of the slide are visible. But, holding a magnifying glass and/or one or more pairs of reading glasses, an image of the whole slide can be retrieved for each lens, at the appropriate focal length, from anywhere within the cone field of the “white” light. Covering most (~90-95%) of the magnifying glass lens with a sheet of paper c), the slide’s image can still be retrieved from any position in the light cone field; the image’s features are fuzzy, due to a loss of resolution. Yet the object as a whole is still discernable from the smaller amount of light energy passing through the tiny portion of the magnifying glass’ lens not covered by the sheet of paper. In d), the images from multiple objects (in this case a stack four different slides ~1” apart) are simultaneously enfolded into the light field of energy, and a clear image of all of the features of each object as a whole is retrievable from any position in the “empty” field of white light by holding one or more magnifying glasses at the appropriate focal length. Finally, e) depicts the same holographic effect with two slide projectors. When the light fields from two projectors, passing through different slides (a stack of two slides in the top projector and one slide in the other), are simultaneously projected, so that their light fields overlap as they travel to the screen, a clear image of the features of the object depicted in each of the slides is retrievable from any position in the overlapping light cones. By

holding a lens (magnifying glass or reading glasses) at the appropriate focal length, the images of all objects in the slides can be retrieved – either separately, using a single lens, or simultaneously, with multiple lens at the appropriate focal length (from Bradley, 2010; © 2009, R.T. Bradley & R.J. Nixon; reproduced with permission).

QUANTUM-HOLOGRAPHY

Quantum holography is based on Gabor's (1946) energy-based unit of information, the *logon*, which he defines as *the minimum uncertainty with which a signal can be encoded as a pattern of energy oscillations across a waveband of frequencies* (see FIGURE 4A), as in the encoding and transmission of vocal utterances for telephonic communication. He called this unit a *logon* or a *quantum of information* – hence the term *quantum holography* (see Pribram, 1991, § 2). In mathematical terms, the logon is a sinusoidal module variably constrained by space-time coordinates – essentially a *space-time-constrained hologram* (see Pribram, 1991, and Bradley, 2002).

Gabor's concept of information – the encoding of information in energy oscillations at *any* frequency – is a general concept that applies to energetic information communication at *both* the 4-dimensional macro-scale world and the micro-scale of quantum reality. Logons are not discrete units of information, but overlap and occur as a modularized series of space-time-constrained sinusoids in which the data in each module are spectrally enfolded, to some degree, into the data of adjoining logons (see FIGURE 4B). This overlap has a significant implication for information communication from the future, in that each logon, in Gabor's words, contains an *“overlap [with] the future”* (Gabor, 1946: 437; my addition and italics). This means, in effect, that each unit of information, by virtue of its spectral enfoldment with adjoining units, contains information about the future order energetically encoded into the unit that succeeds it (Bradley, 1998; Bradley & Pribram, 1998).

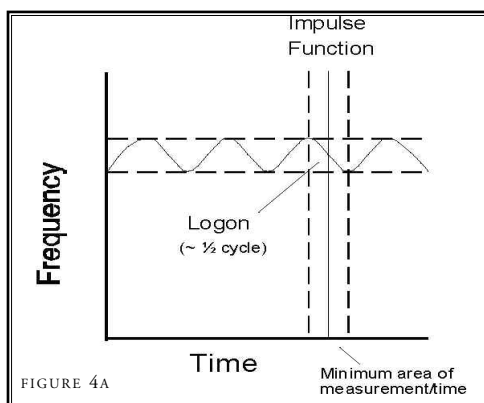


FIG. 4 ~ Gabor's elementary unit of energetic information – the Logon.

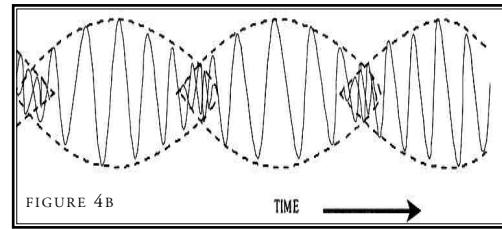


FIGURE 4A depicts an idealized graphical representation of a Hilbert Space showing a logon – an elementary unit of energetic information – in terms of Gabor's (1946) (energy) frequency and space/time limits of measurement. FIGURE 4B shows a representation of the overlap among a modularized series of logons (© Bradley & Pribram, 1998; reproduced with permission.)

EXPLAINING NONLOCAL INTUITION

From the micro-scale of the quantum domain to the macro-scale of the 4-dimensional world, all objects and entities in the universe are energized in a constant state of oscillation at different energy frequencies. The energetic oscillations from all objects generate energy wave fields that radiate outward and interact. As a wave field of *any* kind interacts with a physical or biological object, a part of the wave is reflected from the object's surface and part of the wave's energy is absorbed, causing the object to become energized and emit another wave outward back towards the source of the initial wave (Marcer, 2004). Based on the derivation of macro-scale images from the application of quantum holography in *fMRI* studies, it is now known that the returning wave inevitably contains nonlocal quantum-level information about the object's internal organization and microscopic features, along with its external and macroscopic features (Schempp, 1992). Moreover, the complete event history of the object's movement in time through its 3-dimensional environment is carried by a quantum hologram (Mitchell, 2000). Taken altogether, this produces a holographic process in which micro-scale nonlocal quantum-level information about the object's organization and history is energetically encoded and communicated back to the macro-scale source of the initial wave.

The interaction between these two wave fields generates an interference pattern in which, at the moment of conjunction of the object and reference waves – the instant the interference pattern is created – both waves *are spatially and temporally coherent*. As a hologram, the interference pattern spectrally encodes phase-dependent information about the object's internal and external organization and its event history (Schempp, 1992; Mitchell, 2000). To decode the information, a reference wave is required, and Marcer (1998) has established *“that ‘any waves’ reverberating through the universe remain coherent with the waves at the source, and*

are thus sufficient to serve as the reference to decode the holographic information of any quantum hologram emanating from remote locations” (Mitchell, 2000: 302; emphasis added).

At the quantum level, the area of intersection in the interference pattern is a quantum hologram containing quantum-level information reflecting this macro-scale process. Because the area of intersection involves an interaction between wave fronts, in which the radiation of energy in one wave front is modularized by the constraint of the wave front of radiating energy in the other, it is equivalent to Gabor’s quantum – or elementary unit – of energetic information, the logon ($\sim \frac{1}{2}$ cycle) (Pribram, private communication). This means that the quantum hologram is essentially a logon, or a Gaussian-constrained hologram, in Pribram’s (1991) terms. And since, by virtue of the overlap among logons, each logon contains spectrally enfolded information about the future (Gabor, 1946), then each quantum hologram also contains quantum-level information about the future organization of the macro-scale object with which it is associated.

ATTUNEMENT BY ENERGETIC RESONANCE

Marcer (1995) has shown that perception requires both an incoming wave field of sensory information about the object and an outgoing wave field of attentional energy, and that a relationship of “phase-conjugate-adaptive-resonance” (PCAR) must exist between the two wave fields in order to perceive an object in the macro-scale 4-dimensional world⁸. Thus PCAR is a process in which the incoming and outgoing wave fields are phase-conjoined by the percipient’s act of attention, in that s/he tunes into and maintains “vibratory resonance” with the object’s energetic oscillations at the quantum level (Marcer, 1995).

When two interpenetrating wave fields are radiating synchronized oscillations at the same energy frequency, the conjunction of individual waves creates a spatially and temporally coherent channel of interaction connecting the object source points of the two wave fields (see FIGURE 5). This channel is essentially a logon pathway for optimal information communication, and it is also generated in systems involving multiple objects with synchronized oscillations at the same energy frequency, such as socially coherent

groups (Bradley, 2010b). However, this does not hold for interaction between wave fields radiating energy oscillations at varying frequencies; in such cases effective communication is impeded by spatial and/or temporal incoherence in the pattern of interpenetration between the wave fields. But when wave fields at different energy frequencies are attuned and oscillate in *harmonic resonance*, a coherent channel of communication emerges from the radiation of synchronized oscillations across the wave fields (see Bradley, 2007, FIGURE 8). This provides for a logon pathway of information communication across different scales of organization: from the quantum level micro-scale domain, to the 4-dimensional macro-scale world, and vice versa. Since the overlap among logons means information about future order is spectrally enfolded, this creates an information processing mechanism by which foresight of the future is contained in the logon or nonlocal quantum hologram at hand.

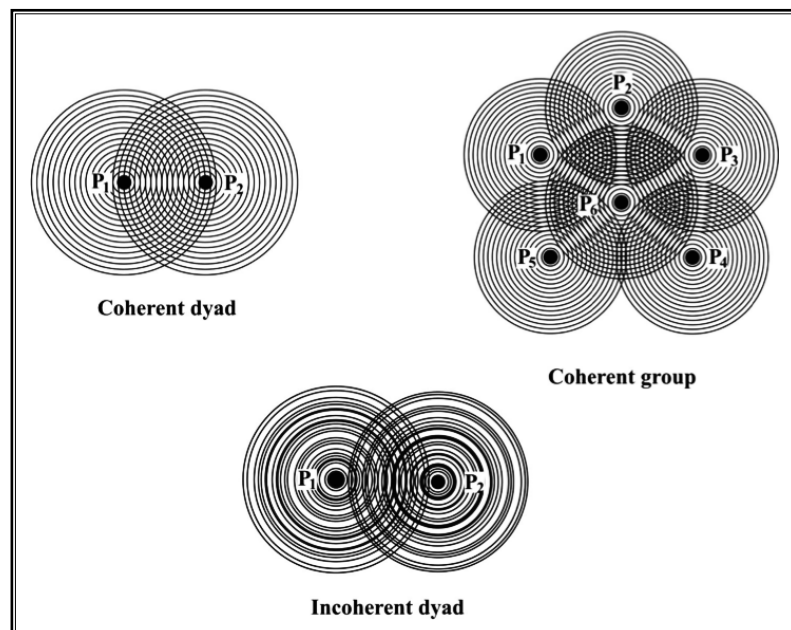


FIG. 5 – Bio-emotional energy fields and communication channels.

This figure shows how a channel of coherent interaction – phase coherence – is generated between two persons (top left; Person #1, P1, and Person #2, P2; P2 could also be an object) when their interpenetrating bio-emotional wave fields are radiating oscillations at a common resonant energy frequency. This also holds for larger systems composed of wave fields oscillating at the same frequency (top right); where the two wave fields from each pair of individuals interpenetrate coherent channels of interaction are created for each dyadic relation in the system. However, this does not occur for wave fields

radiating energy oscillations at different non-harmonic frequencies (bottom); effective communication is impeded by an incoherent pattern of interpenetration between the two wave fields (© 2010, Bradley, Gillin, & Tomasino; reproduced with permission).

PASSIONATE ATTENTION AND THE HEART'S ROLE

As noted, the act of conscious perception requires both an incoming wave field of sensory information about the object *and* an outgoing wave field of attentional energy. The body's psychophysiological systems generate numerous fields of energy, at various frequencies, that radiate outwards from the body as wave fields in all directions (Becker & Selden, 1985). Of these, the heart generates the most powerful, rhythmic electromagnetic field (McCraty et al., 2009). Not only does a massive deceleration in the heart's pattern of rhythmic activity occur at the moment of mental attention, which would generate a great change recorded in the outgoing wave field, but it is also known that nonlocal perception is related to the percipient's degree of emotional arousal generated by an object. It is the individual's *passion* or "rapt attention," as Radin (1997a) calls it – the biological energy activated in the individual's emotional connection to the object of interest – that generates the outgoing attentional wave directed to the object. And since it is well established that the heart's energetic pattern of activity reflects feelings and emotional experience (Tiller et al., 1996)⁹, it is likely that the heart is instrumental in generating the outgoing wave of attentional energy directed to the object.

The calming of extraneous thoughts and adoption of positive emotional interest involved in the act of "paying attention to" distant locales or nonlocal objects establishes a relationship of PCAR with the quantum level of an object at the distant location. It is well documented that attention is significantly enhanced when a focused, self-generated positive emotional state is sustained (Friedrickson, 2002; Isen, 1999). Maintenance of a positive emotional state induces a shift to a coherent order in the heart's beat-to-beat pattern of rhythmic activity – a global state of increased synchronization and harmony in psychophysiological processes, referred to as *psychophysiological coherence*; a negative emotional state like anger or frustration, produce an incoherent order of erratic, irregular waveforms (discussed at length in McCraty et al., 2009; see FIGURE 2, McCraty and Deyhle, in this issue). While the interpenetration between the outgoing coherent wave fields generated in the state of psychophysiological coherence and the incoming wave fields of quantum coherence from external objects and events creates a oscillatory channel of energetic resonance for information communication, such

communication is impeded when the body's psychophysiological systems are in a state of incoherence.

To the degree that a coherent relationship of energetic resonance between the object and the percipient is maintained – that the object's quantum wave field and the attentional wave field of the percipient are attuned, locked in a resonant feedback loop – the individual's psychophysiological system (the brain, the heart, and the body as a whole) can receive and process nonlocal information as quantum holograms.

One pathway of virtually instantaneous nonlocal information communication is at the quantum level through quantum coherence. Another pathway for information communication at hyperspeeds appears likely when a third emergent wave field is generated by the interaction between incoming and outgoing wave fields at the same frequency, or by harmonic resonance when wave fields of different frequencies interact, as described elsewhere (Bradley, 2006 or 2007). Given that the heart receives information about future events *before* the brain (McCraty, Atkinson, & Bradley, 2004b), it plays a significant role in the body's sensing and processing of the quantum holograms of nonlocal objects and events. Moreover, it is likely that the pre-stimulus heart-generated change in afferent neural signals McCraty et al. (2004b) observed is actually a signal to the brain about the incoming quantum-holographically encoded information about the intuitive event. Once received, such quantum-holographic information about distant objects is decoded and converted by the brain, through a reverse Fourier transform process, into mental imagery, feelings, and other sensations as described by Pribram (1991).

NONLOCAL AGENCY

A secondary aim of the theory is to extend the account to include nonlocal agency – the degree to which an individual's *passionate intentional focus* on a nonlocal object may influence its actualization into reality (Bradley & Tomasino, 2011). I begin with a brief review of the evidence on the effect of mental/emotional intention on physical systems and living systems.

EVIDENCE OF INTENTION-MATTER EFFECTS

The idea that the mind can affect the physical universe is a fundamental postulate of quantum theory: namely, that the observer's act of measuring the state of the quantum system causes the wave function of uncertainty (all possible states of the quantum system) to collapse to the certainty of the observed outcome. While there have been mixed results from three previous studies on this question (see Radin, 1997a), an

important recent, rigorous study – using a counter-balanced design, comparing “experienced meditators” with “non-meditators” and a control group (N = 137) over 250 sessions in six experiments – has found compelling evidence: specifically, that focused mental attention by “experienced meditators” on the behaviour of sub-atomic particles (photons) emitted by a double-slit optical apparatus was significantly correlated ($p = 6 \times 10^{-6}$) “in predicted ways with perturbations in the double-slit interference pattern” (Radin, et al., 2012: 157). If these results are replicated, this finding will be of monumental import.

There is also a large body of additional experimental evidence. This includes meta-analyses of hundreds of “conceptually identical”¹⁰ dice tossing and Random Number Generator (RNG) experiments conducted by Radin and colleagues (Radin & Ferrari, 1991; Nelson & Radin, 1987, 1990; Radin & Nelson, 1989), and an analysis of the entire database of 1,262 RNG experiments conducted at Princeton University’s PEAR Lab (Nelson et al., 1991), which all found a small (-1.00% overall success margin), statistically significant result, with odds against chance $>1^9$ to 1. Moreover, there is also evidence of a collective effect – of a “coherent attention or emotional response” to events of global import (such as the 2000 Olympic Games Opening Ceremony) – on the behaviour of a worldwide network of RNGs, in a recent study of some 236 global events conducted by the Global Consciousness Project (combined overall significance, $p < 3 \times 10^{-6}$) (Bancel & Nelson, 2008: 1, my italics).

EVIDENCE OF INTENTION-LIVING SYSTEM EFFECTS

There is a solid body experimental evidence documenting the effects of focused mental/emotional intention on living systems – including 56/131 studies with positive results on enzymes, cells, DNA, bacteria, plants, animals, and humans (overall odds against chance success rate, $>1^{12}$ to 1) (Radin, 1997a). Most experiments have been on the effects of nonlocal intention/emotion on the human autonomic nervous system of remote percipients (e.g., Braud, 1981; Braud & Schlitz, 1989, 1991). While a 5% success rate would be expected by chance, 57% of the experiments produced independent significant effects (combined odds against chance, 1^{14} to 1). In an interesting subset of studies involving over 400 trials, Braud and Schlitz (1991) found that a remote “sender” could stimulate unconscious fluctuations in emotion (measured by electrodermal activity) in a “receiver” purely by thinking to “arouse” or “calm” that person, on a random schedule. Moreover, a related

body of experiments, spanning more than eighty years – so-called “staring” studies – have consistently found nonlocal effects on a “receiver’s” awareness being “watched” by a “sender” in a remote location (Radin, 1997a). Also, the Institute of HeartMath has documented measurable effects of heart-focused, positive emotional intention upon the behaviour of physical and biological systems – water, DNA, and human cells – *in vitro* (McCraty & Tomasino, 2003; Rein & McCraty, 1994). Finally, there is the sensitivity to nonlocal events and interactions Rupert Sheldrake (1999) documents for animals – including dogs “knowing” when their owners decide to come home, and interesting electrophysiological evidence – involving measures of heart rate variability – of a nonlocal interaction effect between animals and humans, including that between people and their pets – dogs and horses, and wild animals, such as dolphins and whales (see FIGURE 6).

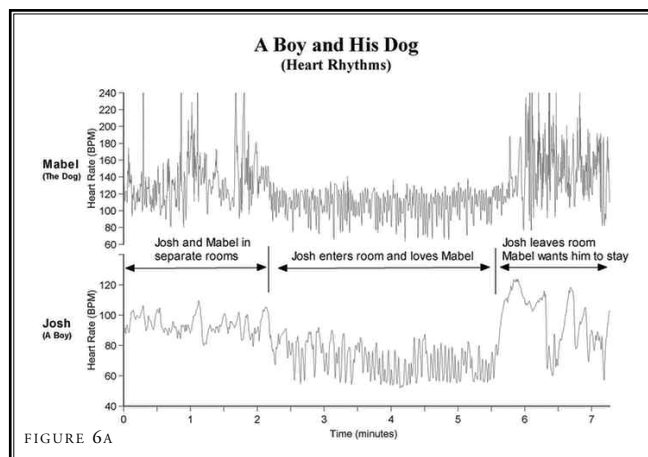
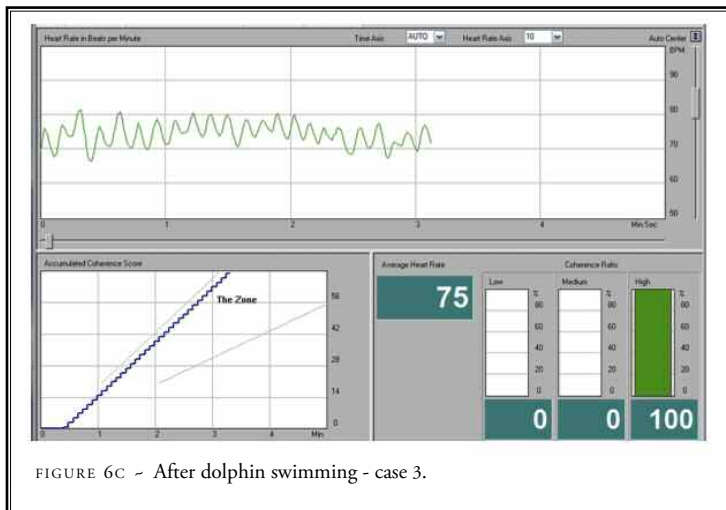
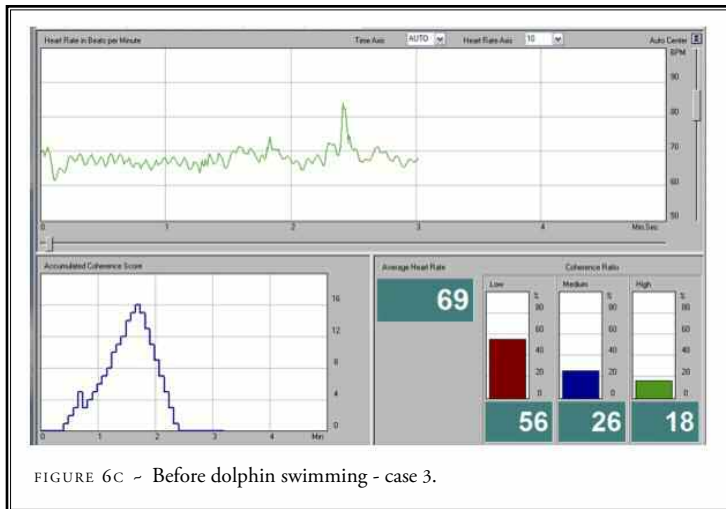
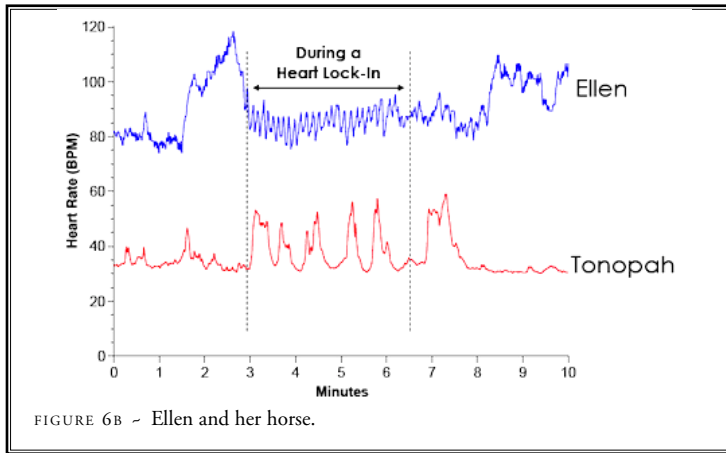


FIG. 6 - Examples of Bio-Emotional Interaction Between Humans and Animals.

FIGURE 6A shows real-time electrophysiological measures of heart rate variability (HRV), recorded in a boy (Josh) and his dog (Mabel), in which the boy’s act of intentionally feeling “love” for his dog (middle segment) shows entrainment of their respective patterns of heart rhythm activity – a shift to coherent, synchronized waveforms. FIGURE 6B shows real-time HRV recordings between a woman (Ellen) and her horse (Tonopah), during which Ellen made an intentional psychophysiological shift to state of “love” by using a HeartMath heart-based technique for sustaining a positive emotional focus (“Heart Lock-In”). Clearly apparent is the synchronization of the horse’s pattern of heart rhythm activity to Ellen’s coherent state. Figure 6c shows “before” and “after” real-time HRV recordings for a woman swimming with Spinner Dolphins in the ocean off the island of Hawaii. The “before” recording was taken in a neutral baseline resting state before interaction with the dolphins. The “after” recording was made immediately upon leaving the water after swimming with a pod of dolphins for an hour or more. The effect of the human–dolphin interaction experience, which most dolphin swimmers report as arousing a strong positive emotional



response in them – “love,” “awe,” “gratitude,” “joy,” “serenity,” “oneness,” “flow,” etc. – can be clearly seen; Tomasino and I recorded a similar response of people swimming with Humpback Whales, in Tonga. FIGURE 6A and 6B were recorded by and are reproduced here with permission of the Institute of HeartMath, © 2006; FIGURE 6C was recorded by Dana Tomasino using HeartMath’s emWave® heart rhythm monitor and feedback system © 2008, and is reproduced with permission.

Overall, there is persuasive experimental evidence showing that focused intentional emotional energy from a nonlocal source has a subtle but measurable effect on the behaviour of physical and biological systems, including human psychophysiological systems. These effects are not due to chance, nor flaws or limitations with measurement and experimental or analysis (Radin, 1997a: 144-145; Nelson et al., 1984, 1991; Schmidt et al., 1986).

EXPLAINING NONLOCAL AGENCY

The same multi-level psychophysiological and quantum-holographic processes of attunement and energetic resonance not only provide a channel for nonlocal intuition, but are also the means by which *passionate intention* may affect objects and events distant in space/time (Bradley & Tomasino, 2011). It is postulated that the individual’s mental intention is quantum-holographically encoded into the powerful heart-based wave field of bio-emotional energy radiating from the percipient to the nonlocal object. As for intuition, it is the individual’s *passion* – the biological energy activated in the individual’s emotional connection to the object of interest – that is propelling the outgoing wave field of intentional bio-emotional energy, and driving the nonlocal effects.

I begin with the assumption that a thought or an intention is a distinct pattern of electrical activity in the brain, and that, as an informational unit it is energetically encoded as a quantum-hologram. The act of attention involves the generation of an outgoing wave field of bio-emotional energy from an individual directed towards the

object of interest. And, insofar as this act includes an intentional disposition (e.g., a preference, a desire, a goal, or a plan), this intention is recorded as implicit information spectrally encoded as a quantum-hologram in the outgoing wave field. The more passion (emotional arousal) with which the intention is held,

the greater the activation of the individual's bio-emotional energy, and, hence, the stronger the recording of the quantum-hologram of intention in the outgoing wave field.


As the outgoing wave field interacts with the oscillating nonlocal object, the impact of each wave front reflects a part of the wave back from the object's surface towards the individual. However, part of the wave's energy is actually *absorbed* via the vibratory oscillations of the object. Since the record of the individual's intention is spectrally encoded and distributed throughout the entire outgoing wave field, the part that is absorbed by the object actually contains a quantum hologram of the individual's intention. Thus, as energetically encoded information, the quantum hologram of the individual's passionate intention can influence, via energetic resonance, the future potential of the object's material organization and behaviour. And insofar as the outgoing wave field is organized as a harmonic series, the quantum hologram of intention is transmitted to the quantum level of the object, by harmonic resonance with the coherent wave field of quantum emissions from the object. Here, as energetically encoded information, the quantum hologram of intention can effect a subtle but significant change in the quantum organization of the object, thereby implicitly *in-forming* – literally, *giving shape to* – (Bohm & Hiley, 1993) the object's future macro-scale organization and behaviour.

Elsewhere (Bradley, 2007; Bradley & Tomasino, 2011), I have described how the field effects of attentional or intentional bio-emotional energy are amplified, and thus be significantly stronger, when a group's members are socio-emotionally attuned to one another in a coherent group.

THE EYE OF THE I

Given that positive emotions are involved in co-creating – with the nonlocal object – the energetic channel for incoming and outgoing nonlocal information transmissions, and that a quantum holographic approach, like that used here, continues to be efficacious in explaining nonlocal consciousness phenomena, I want to conclude by relating these ideas to the “Big Love” that is “all seeing” and “all knowing.”

Big Love is self-less, nonjudgmental and all-embracing, and, because it accepts all, Big Love is objective. Long known across the eons of human experience, Big Love provides the pathway to “truth” in virtually all human endeavours – whether in matters spiritual or moral, intellectual or scientific, aesthetic, or in the “right action” of an individual's behaviour, or in the “peak performance” of social ensembles and groups.

Viewed in the terms of the quantum-holographic account presented here, Big Love radiates outwards as a field of highly coherent bio-emotional energy. Operating as a quantum-holographic information processing system, the conjunction of Big Love's outgoing field of coherent energy with the incoming energy fields radiating from all objects and events creates a continuous series of interference patterns, which contain energetically-encoded information about the objects. Like the coherent light of a laser, the coherent energy of Big Love acts as a reference beam, decoding a continuous succession of images – *quantum holographs* – of the internal and external order of objects, and their event history. Thus the lens of the “eye” of Big Love optimizes perception, awareness, and consciousness. It provides the informational channel to the *re*-presentations of reality by which deep insight, profound understanding, and intuitive foreknowledge *in-forms* the “I” of the self, thus enabling the ‘highest’ levels of human consciousness and worldly action (Bradley & Tomasino, forthcoming). 

ACKNOWLEDGMENTS

My thanks to Karl Pribram, Robert Rees, and Roger Nelson for reviewing and earlier version of this paper. I have a special debt of gratitude to my partner, Dana Tomasino, whose own interest in an energetic perspective and research on the psychophysiology of the heart and emotions inspire my work on the topics in this paper.

¹ There is not room to review three other recent theories of nonlocal interaction (Mitchell, 2000; Rauscher & Targ, 2001; Tiller, 2004); for a discussion, see Bradley (2006 & 2007a).

² See: Bradley (2006, 2007, 2010, 2011), Bradley & Tomasino (2011), and Bradley (et al., 2010), for the original works on this question.

³ The RNGs are hardware circuits that use inherent electronic noise to generate truly random bits. Each RNG is attached to a personal computer which continuously collects 200 random bits per second and transmits packets of data from 50 RNG sites across the world over the internet to a central server in Princeton, New Jersey, US, for data archiving (see Bancel & Nelson, 2008).

⁴ See Scargle (2002) and May & Spottiswoode (2002) for a different interpretation.

⁵ This section draws heavily from Bradley (2006, 2007, 2010, 2011) and Bradley & Tomasino (2011).

⁶ This draws heavily from Bradley and Pribram (1998) and Bradley (2002).

⁷ It should be noted that because photographs record the intensity changes and not the phase-shifts of the light waves bouncing off the object, only a 2-dimensional image of the object can be recorded.

⁸ “Marcer (1995) has proposed that [...] resonance requires a virtual path mathematically equal but opposite to the incoming sensory information about the object. Further, that it is the incoming space/time information (visual, acoustic, etc.), which

decodes the information of the quantum hologram and establishes the condition of *pcar* [phase-conjugate-adaptive-resonance] so that accurate three dimensional perception is possible” (Mitchell, 2000: 297).

⁹ The research shows that information about a person’s emotional state is communicated both throughout the body *and* out into the external environment via the heart’s pattern of activity. The rhythmic patterns of beat-to-beat heart activity change significantly as we experience different emotions. In turn, these changes in the heart’s beating patterns create corresponding changes in the structure spectra of the electromagnetic field radiated by the heart (see the review of research in McCraty et al., 2009).

¹⁰ The early studies (1935-1987) were dice tossing experiments, whereas, since the 1990s researchers have conducted experiments on the effect of mental/emotional intention on RNG output.

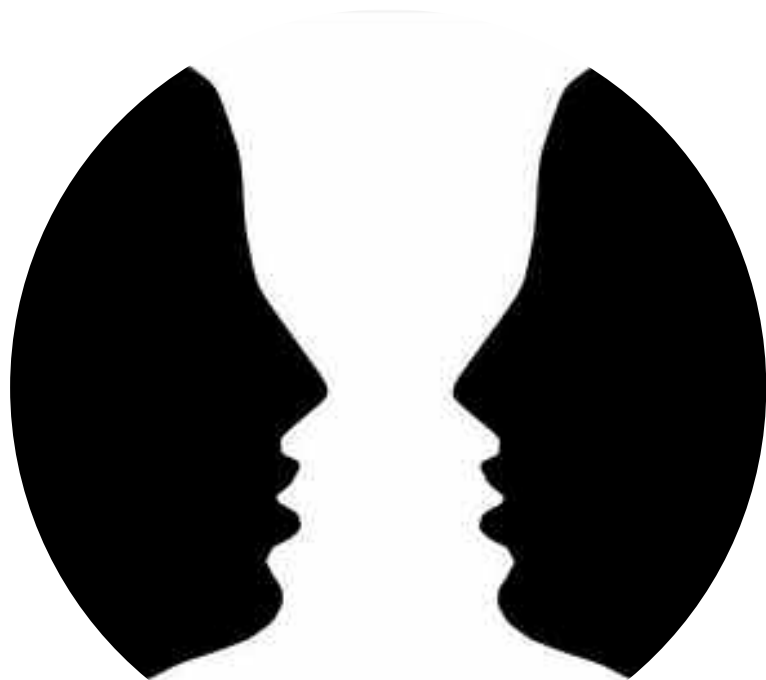
REFERENCES

- AGOR, W. (1984). *Intuitive Management: Integrating Left and Right Brain Skills* (Upper Saddle River, NJ: Prentice Hall).
- ASPECT, A., P. GRANGIER, & G. ROGER (1982). “Experimental realization of Einstein-Podolsky-Rosen-Bohm Gedanken experiment: a new violation of Bell’s inequalities”, *Physical Review of Letters*, 49: 91-94.
- BANCEL, P. AND R. NELSON (2008), “The GCP experiment: design, analytical methods, Results”, *Journal of Scientific Exploration*, 22 (3), 309-33.
- BECKER, R.O., & G. SELDEN (1985). *The Body Electric* (New York: William Morrow).
- BEM, D. J. (2011). “Feeling the future: Experimental evidence for anomalous retroactive influences on cognition and affect”, *Journal of Personality and social Psychology*, 100(3): 407-425.
- BERNSTEIN, P. (2005). “Intuition: What science says (so far) about how and why intuition works”, in R. Buccheri, A. C. Elitzur, & M. Saniga (eds.), *Endophysics, time, quantum and the subjective*: 487-506 (Singapore: World Scientific).
- BIERMAN, D. J. (2000). “Anomalous baseline effects in mainstream emotion research using psychophysiological variables”, *Proceedings of Presented Papers*, 43rd Annual Convention of the Parapsychological Association, 17-20 August.
- BIERMAN, D. J., & RADIN, D. I. (1997). “Anomalous anticipatory response on randomized future conditions”, *Perceptual and Motor Skills*, 84: 689-690.
- BIERMAN, D. J., & SCHOLTE, H. S. (2002). “Anomalous anticipatory brain activation preceding exposure of emotional and neutral pictures”. Paper presented at the Toward a Science of Consciousness IV Conference. Tuscon, AZ, 4-8 April.
- BLASBAND, R. A. (2000). “The ordering of random events by emotional expression”, *JSE*, 14: 195-216.
- BOHM, D. (1980). *Wholeness and the Implicate Order* (London: Routledge & Kegan).
- BOHM, D. AND B.J. HILEY (1993). *The Undivided Universe* (London: Routledge & Kegan).
- BRADLEY, R. T. (1987). *Charisma and Social Structure: A Study of Love and Power, Wholeness and Transformation* (New York: Paragon).
- (1998). “Values, agency, and the theory of quantum vacuum interaction”, in Pribram, K. H. (ed), *Brain and Values: Is a Biological Science of Values Possible*, § 18: 471-504 (Mahwah, NJ: Erlbaum).
- (2002). “Dialogue, information, and psychosocial organization”, in N. C. Roberts (ed.), § 10: 243-288, *Transformative Power of Dialogue* (Amsterdam: Elsevier).
- (2003). “Love, power, mind, brain, and agency”, in D. Loye (ed.), *The Great Adventure: Toward a Fully Human Theory of Evolution*: 99-150 (New York: SUNY).
- (2006). “Psychophysiology of entrepreneurial intuition: A quantum-Holographic theory”, in M. Gillin (ed.), *Regional frontiers of entrepreneurship research*: 163-183 (Melbourne: AGSE, Swinburne University of Technology).
- (2007). “Psychophysiology of intuition: A quantum-holographic theory of nonlocal communication”, *World Futures: The Journal of General Evolution*, 63(2): 61-97.
- (2010a). “Passionate attention and the psychophysiology of entrepreneurial intuition: A quantum-holographic theory”, *International Journal of Entrepreneurship and Small Business*, 9(3): 324-348.
- (2010b). “Detecting the identity signature of secret social groups: Holographic processes and the communication of member affiliation”, *World Futures: The Journal of General Evolution*, 66(2): 124-162.
- BRADLEY, R. T., GILLIN, M., MCCRATY, R., & ATKINSON, M. (2010). “Nonlocal intuition in Entrepreneurs and non-entrepreneurs: Results of two experiments using Electrophysiological measures”, *International Journal of Entrepreneurship and Small Business*, 10: 324-348.
- BRADLEY, R. T., & K. H. PRIBRAM (1998). “Communication and stability in social collectives”, *J. of Social and Evolutionary Systems*, 21, 1: 29-81.
- BRADLEY, R. T., & TOMASINO, D. (2011). “A quantum-holographic approach to the Psychophysiology of intuitive action”, in L.-P. Dana (ed.), *World Encyclopedia of entrepreneurship*: 318-347 (Cheltenham, UK and Northampton, MA, USA: Edward Elgar).
- (forthcoming). *The eye of the I: Love and the development of consciousness*.
- BRADLEY, R. T., TOMASINO, D., & GILLIN, M. (2010). “Transformational dynamics of Entrepreneurial systems: Holographic processes and the organizational basis of intuitive action”, *International Journal of Entrepreneurship and Small Business*, 11(2): 183-204.
- BRAUD, W. G. (1981). “Psi performance and autonomic system activity”, *J. of the American Society for Psychological Research*, 75: 1-35.
- BRAUD, W.G. AND M.J. SCHLITZ (1989). “A methodology for the objective study of transpersonal imagery”, *Journal of Scientific Exploration*, 3, 43-63.
- (1991). “Consciousness interactions with remote biological systems: Anomalous intentionality effects”, *Subtle Energies*, 2(1): 1-46.
- FOWLER, H. W., & FOWLER, F. G. (Eds.) (1964). *The Concise Oxford Dictionary* (Oxford: Oxford UP).

- FREDRICKSON, B. L. (2002). "Positive emotions", in C. R. Snyder & S. J. Lopez (eds.), *Handbook of positive psychology*: 120-134 (New York: Oxford UP).
- GABOR, D. (1946). "Theory of communication", *J. of the Institute of Electrical Engineers*, 93: 439-457.
- (1948). "A new microscopic principle", *Nature*, 161: 777-778.
- HILLMAN, J. (2007). *The Thought of the Heart and the Soul of the World* (Putnam, CN: Spring Publications).
- ISEN, A. M. (1999). "Positive affect", in T. Dalgleish & M. Power (eds.), *Handbook of Cognition and Emotion*: 522-539 (New York: Wiley).
- JAHN, R. G., & DUNNE, B. J. (1987). *Margins of reality: The Role of Consciousness in the Physical World* (New York-San Diego, CA: Harcourt Brace Jovanovich).
- LA PIRA, F., & M. GILLIN (2006). "Nonlocal intuition and the performance of serial entrepreneurs", *Int. J. of Entrepreneurship and Small Business*, 3(1).
- LASZLO, E. (2003). *The connectivity hypothesis: Foundations of an integral science of quantum, cosmos, life, and consciousness* (New York: SUNY).
- LIEBERMAN, M. D. (2000). "Intuition: A social and cognitive neuroscience approach", *Psychological Bulletin*, 126(1): 109-137.
- MARCER, P. (1995). "A proposal for a mathematical specification for evolution and the Psi field", *World Futures: The Journal of General Evolution*, 44(283), 149-159.
- (2004). *Status of the mission*, Cybernetic Machine Specialist Group, BritishComputer Society, Available at: www.bcs.org.uk/sgggroup/cyber/status.htm (accessed October 16, 2005).
- MARCER, P., & W. SCHEMPP (1997). "Model of the neuron working by quantum holography", *Informatica*, 21: 519-534.
- (1998). "The brain as a conscious system", *Int. J. of General Systems*, 27: 231-248.
- MAY, E., PAULINYI, T., & VASSY, Z. (2005). "Anomalous anticipatory skin conductance Response to acoustic stimuli: Experimental results and speculations about a mechanism", *Journal of Alternative and Complementary Medicine*, 11(4): 695-702.
- MAY, E. AND J. SPOOTISWODE (2001), "Memorandum for the record, re: analysis of Global Consciousnesses Project's data near the 11 September 2001 events", available at <http://noosphere.princeton.edu/papers/Sep1101.pdf> (accessed 20 September 2006).
- MCCRATY, R., ATKINSON, M., & BRADLEY, R. T. (2004a). "Electrophysiological evidence of intuition: Part 1. The surprising role of the heart", *J. of Alternative and Complementary Medicine*, 10 (1):133-143.
- (2004b). "Electrophysiological evidence of intuition: Part 2. A system-wide process?", *J. of Alternative and Complementary Medicine*, 10 (2): 325-336.
- MCCRATY, R., M. ATKINSON, D. TOMASINO, & R.T. BRADLEY (2009). "The coherent heart: Heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order", *Integral Review*, 5(2): 11-115.
- MCCRATY, R. AND D. TOMASINO (2003). "Modulation of DNA conformational states by heart- focused intention" (Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath) Publication No. 03-008.
- MITCHELL, E. (2000). "Nature's mind: the quantum hologram", *Int. J. of Computing Anticipatory Systems*, 7: 295-312.
- (2004). "Quantum holography: a basis for the interface between mind and matter", in P. G. Rosch & M. S. Markov (eds.), *Bioelectromagnetic medicine*: 153-158. (New York: Dekker).
- MITCHELL, R.K., BUSENITZ, L., BIRD, B., GAGLIO, C. M., MCMULLEN, J. S., MORSE, E., & SMITH, J. (2007). "The central question in entrepreneurial cognition research", *Entrepreneurship Theory and Practice*, 31(1): 1-27.
- MYERS, D. G. (2002). *Intuition: Its Powers and Perils* (New Haven, CT: Yale UP).
- NADEAU, R., & KAFATOS, M. (1999). *The Nonlocal Universe: The New Physics and Matters of the Mind* (New York: Oxford UP).
- NELSON, R. D. (2002). "Coherent consciousness and reduced randomness: correlations on September 11, 2001", *JSE*, 16(4): 549-570.
- NELSON, R.D. AND D.I. RADIN (1987). "When immovable objections meet irresistible evidence", *Behavioral and Brain Sciences*, 10, 600-601.
- NELSON, R.D., Y.H. DOBYNS, B.J. DUNNE AND R.G. JAHN (1991). "Analysis of variance of REG experiments: operator intention, secondary parameters, database structure", *Technical Note PEAR 91004*, (PEAR, Princeton University).
- NELSON, R.D., B.J. DUNNE AND R.G. JAHN (1984). "An REG experiment with large database capability, III: operator related anomalies", *Technical Note PEAR 84003* (September) (PEAR, Princeton University).
- PENROSE, R. (1989). *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics* (Oxford, UK: Oxford UP).
- PIAGET, J. (1983). *On Affectivity and Intelligence* (New York: Academic Press).
- PRIBRAM, K. H. (1991). *Brain and Perception: Holonomy and Structure in Figural Processing* (Hillsdale, NJ: Lawrence Erlbaum Associates).
- RADIN, D. I. (1997a). *The Conscious Universe: The Scientific Truth of Psychic Phenomena* (San Francisco, CA: Harper Edge).
- (1997b). "Unconscious perception of future emotions: an experiment in presentiment", *Journal of Scientific Exploration*, 11: 163-180.
- (2002). "Exploring the relationship between random physical events and mass human attention: asking for whom the bell tolls", *JSE*, 16(4): 533-547.
- (2004). "Electrodermal presentiments of future emotions", *JSE*, 18: 253-273.
- RADIN, D.I. AND D.C. FERRARI (1991). "Effects of consciousness on the fall of dice: a meta-analysis", *Journal of Scientific Exploration*, 5 (3), 61-84.

- RADIN, D.I. AND R.D. NELSON (1989). "Evidence for consciousness-related anomalies in random physical systems", *Foundations of Physics*, 19, 1499-514.
- RADIN, D. I., MICHEL, L., GALDMEZ, K., WENDLAND, P., RICKENBACH, R., & DELORME, A. (2012). "Consciousness and the double-slit interference pattern: Six experiments", *Physics Essays*, 25 (2): 157-171.
- RAUSCHER, E. AND R. TARG (2001), "The speed of thought: investigation of a complex space-time metric to describe psychic phenomenon", *Journal of Scientific Exploration*, 15, 331-54.
- REIN, G. AND R. MCCRATY (1994). "Structural changes in water and DNA associated with new physiologically measurable states", *Journal of Scientific Exploration*, 8 (3), 438-9.
- SCARGLE, J.D. (2002). "Was there evidence of global consciousness on September 11, 2001?", *Journal of Scientific Exploration*, 16 (4), 571-7.
- SCHEMPF, W. (1992). "Quantum holography and neurocomputer architectures", *Journal of Mathematical Imaging and Vision*, 2, 109-64.
- SCHMIDT, H., R. MORRIS AND L. RUDOLPH (1986). "Channelling evidence for a PK effect to independent observers", *Journal of Parapsychology*, 50, 1-16.
- SCHLITZ, M. J., & W. BRAUDE (1997). "Distant intentionality and healing: assessing the evidence", *Alternative Therapies*, 3: 87-88.
- SHELDRAKE, R. (1999). *Dogs that Know When their Owners are Coming Home: And Other Unexplained Powers of Animals* (New York: Three Rivers Press).
- SIMON, H. A. (1987). "Making management decisions: the role of intuition and emotion", *Academy of Management Executive*, 1(1): 57-65.
- SPOTTISWOODE, S. J. P., & MAY, E. C. P. (2003). "Skin conductance prestimulus response: Analyses, artifacts and a pilot study", *Journal of Scientific Exploration*, 17: 617-642.
- TARG, R. AND J.E. KATRA (2000). "Remote viewing in a group setting", *Journal of Scientific Exploration*, 14, 107-14.
- TILLER, W. (1999). "Towards a predictive model of subtle domain connections to the physical domain of reality: origins of wave- particle duality, electric-magnetic monopoles and the mirror principle", *Journal of Scientific Exploration*, 13 (1), 41-67.
- (2004). "Subtle energies and their roles in bio-electromagnetic phenomena", in P. G. Rosch & M. S. Markov (eds.), *Bioelectromagnetic medicine*: 159-192 (New York: Dekker).
- TILLER, W. A., MCCRATY, R., & ATKINSON, M. (1996). "Cardiac coherence: A new, Noninvasive measure of autonomic nervous system order", *Alternative Therapies in Health and Medicine*, 2(1): 52-65.
- TITTEL, W., J. BRENDEL, H. ZBINDEN, & N. GISIN (1998). "Violation of Bell inequalities by photons more than 10 km apart", *Physical Review of Letters*, 81: 3563-3566.
- TOMASINO, D. (2007). "The psychophysiological basis of creativity and intuition: accessing the 'zone' of entrepreneurship", *International Journal of Entrepreneurship and Small Business*, 4(5): 528-542.
- TRESSOLDI, P. E., MARTINELLI, M., ZACCARIA, E., & MASSACCESI, S. (2009). "Implicit intuition: How heart rate can contribute to prediction of future events", *Journal of the Society for Psychical Research*, 73(894): 1-16.





CONSCIOUSNESS AND COHERENCE IN CORPORATE SUCCESS*

WALTER BAETS



Walter Baets is Director of the Graduate School of Business of the University of Cape Town. He holds an MSc in Econometrics and Operations Research (Antwerp, B), a PhD in Business Studies (Warwick, UK) and a Habilitation Thesis (Aix-Marseille, F).

Science cannot solve the ultimate mystery of nature... because in the last analysis we ourselves are part of the mystery we are trying to solve...

When you change the way you look at things, the things you look at change.

MAX PLANCK

1 ~ SOME KEY CONCEPTS OF A NEW ONTOLOGY

THE IDEAS PROPOSED HERE ARE BASED ON A NEW paradigm (or at least a less mainstream paradigm), explained in earlier work¹. As a basis for formulating a new paradigm for understanding complex systems in general, and management in particular, as well as to develop an adequate research model, we first summarize some fundamental concepts, often developed in other sciences than those of economy, management or social sciences, but equally applicable in complex social systems.

~ The approach developed and proposed here is inscribed in the holistic paradigm. Holism² is seen as an eternal dynamic interaction between four “spheres”: the mechanical (external) and individual sphere; the mechanical (external) collective sphere; the internal collective sphere (common values), the internal individual sphere (emotions and consciousness). Clearly, in reductionist and rational approaches, the external individual sphere receives all the attention. “Classical” ecologic scientific movements are especially interested in the collective, but always external, sphere. More recent scientific interests attempt to go beyond that, by including more values and emotions (slowly introducing the concept of consciousness). In this sense, holism is evidently founded on a *constructivist* approach.

~ The proposed ontology fits clearly the reality of the *sciences of complexity*³ as the study of dynamic non-linear systems. In particular, it takes into account two important aspects: the constructive role of time, as expressed in the principle of the irreversibility of time in complex processes; and the behaviour far from equilibrium. This principle illustrates why in complex systems it is not possible to extrapolate the future from the past. Complex systems are extremely sensitive to the initial conditions. Minimal changes in these conditions can have major influences on the further development of the process. Finally, Prigogine identifies the most productive state of a (complex) system as one that is far away from equilibrium: “order at the edge of chaos”.

~ Artificial life research has pioneered a complex adaptive systems approach (CAS) called *agent based simulations*. This approach simulates the interaction between different agents and, consequently, simulates *emergent behaviour* in those kinds of systems. An agent is a mini software program. Each agent has characteristics. It is necessary to define the field of action (the limits of the system) and to identify a minimum of interaction rules (and exchange rules). Then, it is necessary to make the system iterate and simulate the dynamic interaction of those agents. The agents meet each other, interact, exchange (and so learn) and, step by step, form a global behaviour with qualities that emerge from the interaction itself.

~ *Synchronicity*, appears in all the sciences and the techniques in which simultaneity plays a role. It is necessary to take into account that this is not to speak about a causal coherence (from cause to effect), but about *coincidence* (as occurring together in time). This has to be considered as potentially useful, even if we cannot explain the more profound cause of the simultaneity. We must remember that we always speak of a synchronicity if the events concerned happen in the same period of time. The relationships therefore, become *a-causal*.

~ The implication of these observations is that the phenomenon of “*entanglement*” (*non locality*), including a real activity at a distance, is not simply epistemological. It is, in effect, ontological by nature⁴ and can be called “*a quantum interpretation*”.

~ The subject of “*implicit order*”⁵ is broached as something like a ground underneath time, a totality,

from which each movement is projected in explicit order. For everything seen, there is something in implicit order at the origin of this projection. If there are a lot of repetitions of an event, then behind it, there is a built constant component. A sort of (fixed) link is born. Via this process, the forms from the past can continue to live in the present. This is what is understood by morphogenetic fields, created by morphogenetic resonance.

~ Ayurveda considers the human being as a self-organizing system composed of a lot of simple elements which are, when taken independently, very stupid, but which together form a formidable *distributed intelligence*. In parallel, a company can be considered as a network of *simple* elements which each *know* what they must know to be able to form correct networks with others.

~ The ontological nature of this quantum structure forces us to look again at our approach to organizations and its management, and on a wider scale at our economic theory. *The understanding of management must therefore be based on the “carrying along” of quantum structures, synchronicity, morphogenetic fields and individual space for self organization.*

2 ~ CONSCIOUSNESS: THE FIFTH FLOOR (DIMENSION) IN THE HOUSE OF KNOWING (WHAT IS THE “HARD” PROBLEM?)

Key to our research endeavors is the role that consciousness plays in organizations⁶. Two major schools of thoughts on consciousness have been identified⁷. The first school, is based on the idea that the brain is a coder/decoder (neuronal actions) and hence, the hard problem of consciousness study is to understand how the brain deals with issues like feeling, colour, senses, etc. This school studies brain operations and considers the problem of consciousness residing in the physical world.

The second school attempts to understand the “first person” perspective. It tries to explore how things feel, and it accepts that one’s “internal movie” has colour, music and feelings. Accordingly, consciousness cannot be reduced to a fixed space-time environment. Thus, the study of consciousness cannot be conducted via classical “third person” research tools.

The first school⁸ accepts that being conscious is activating the winning combination of neurons (as opposed to being not conscious). They refer to the theatre metaphor developed in the Vedantic scriptures and Plato’s ideas. Consciousness is what is in the bright spotlight. The thalamus is the machinery.

Then⁹ the hard problem consists of understanding how qualia (that what explains the redness of red for instance) are generated by the brain. Consciousness¹⁰ is all about how the brain is doing the coding. Scientific progress is limited though, since we do not really know how information is coded in the brain¹¹. Consequently, the brain builds a model and there is a difference between inner and outer (dualism, hence). But even the first school has some out of the box thoughts. According to them, there is more than just wave theory in sound. Heath of a coffee cup is something like mean molecular kinetic energy, but it is not just correlated. There is something like neural correlation, or probably better interconnectedness. Sensations are energies and this “energy” interpretation of consciousness, in fact, open doors for a non (causal) model understanding.

Behaviourists will eventually suggest to get rid of qualia all together but they are opponents of the brain activity school¹². Subjective experience is hard to understand; it is a point of view, a reflective capacity. People are having powerful seductive intuitions that are just wrong. From a third person perspective, you sneak up consciousness from the outside, not from the inside. For them, mystery stuff and dualism is hopeless. Behaviourists categorize the phenomenology of consciousness and explain it.

The second school¹³ defines consciousness as the Technicolor phenomenology “what it is like”. They talk about phenomenological consciousness, on the one hand, and access consciousness on the other hand. The latter form is suppressed, the unconsciousness, images, vivid states. But they admit that studying the phenomenological consciousness alters that same consciousness. This creates issues around research methods used. Some researchers¹⁴ are widely known for their attempts to understand consciousness from a first person perspective. How do things feel? Consciousness for them is subjective data. The hard problem according to them is understanding subjective experience. The processes in the brain are not the feeling itself. Descartes, with his cogito ergo sum, has in a way defined consciousness: the mind (this overwhelming energy and power) creates consciousness; and not the ratio. The connection between brain processes and conscious experience is according to them certainly not causal. Consciousness cannot be reduced (to a fixed time space concept), but it is a fundamental feature of the world. Consciousness is a non-physical thing interacting with the physical world. It gives life meaning and it gives life the interesting locus of value. This interpretation of consciousness finds an ontological home in quantum mechanics.

Consciousness is fundamental to the universal part of our reality¹⁵, like mass, or charge. It is just there. If qualia would exist, they would exist at the lowest level of existence. At the Planck level where space-time is not smooth anymore but quantized. At this fundamental level, qualia are embedded as patterns in this fundamental granularity of space-time geometry that makes up the universe. Our minds do non-algorithmic things anyway¹⁶. They have another logic (a particular collapse of the wave function). It is a type of quantum computing in the brain, according to some this quantum computing takes place in microtubules (a protein structure). Consciousness is quantum processing. You chose what you order in a restaurant as a collapse of a wave function (of those dishes you like). Quantum coherence and entanglement may be essential features of life. The more we are in contact with the subconscious world of enlightenment, the happier we can be.

In fact, this second school of thought suggests that consciousness is a new kind of dimension, a first person sensation that cannot be understood with classical third person research under the Newtonian paradigm. Third person research is genuinely research that is based on reductionism, measurement, inside-outside understanding of reality and rationality. Third person research takes typically place in a three dimensional reality. But scientists, in particular quantum mechanics, suggest a quantum reality¹⁷ based on non-locality, synchronicity and entanglement. This is a world of waves, being a multitude of possibilities until measurement (or observation) collapses the wave into a particle: a particular state created by observation¹⁸. It is the observer (you and me) that seem to create at each moment again, out of the different possibly states, the one that is chosen. In a piece of music, out of the different possible sounds, we select the one we like most. From the different possible sensations the colour red can give, we chose that one that we like most for that given situation.

These schools give meaning to what happens beyond the Wall of Planck, the smallest possibly value in nature, this discovery is mathematical. This exploration suggests the existence of a fifth dimension, that could be a fourth dimension of space, expressed in imaginary (complex) time. Beyond the Wall of Planck, time and space would come together. This would be the world in which things “are” (time and space independent). This state, being a fifth dimension, could be a state of consciousness. This definition of consciousness would perfectly fit the definition that some old traditions (like Ayurveda) give. All understanding is constructed on a number of levels of understanding. In classical sciences, these different

levels are: mathematics, physics, chemistry, biology, and psychology. In noetic sciences¹⁹ those levels are: fractal algebra, energy physics, vibrational chemistry (both based on quantum mechanics), noetic biology (interconnected cells), energy psychology (perceptions and energy fields). In an ancient wisdom tradition like Ayurveda those levels are: matter form, ether and astral body, energy level, desire, capacity to think (conceptualization), intelligence and intuition, and finally Consciousness, as the highest state of being, the highest floor of knowing, the ultimate being.

In this definition of consciousness, indeed, third person research will not be able to clarify what consciousness is, let alone how it would influence corporate behaviour, happiness, etc. This understanding of consciousness would mean that within the classical three dimensional Newtonian world, things cannot have a consciousness. At the same time, consciousness cannot be Newtonian.

If we would like to research consciousness as defined here, we will either have to use first person research methods, possibly still to be developed or use a measurable proxy for consciousness with the adapted research methods to deal with this proxy. This proxy could be “coherence”, as defined further. The research method would be a combination of research on both personal and corporate level. On a personal level, we could use the concept of heart coherence measurement using, for instance, the tool developed by HearthMath²⁰. We develop this concept of coherence further in the next section. On the corporate level, we could be surveying managers with a systemic research tool using artificial neural networks for the analysis.

3 ~ COHERENCE AS PROXY FOR CONSCIOUSNESS

Most of the scientific research known on consciousness and conscious states of mind, link consciousness with coherence (on brain and/or body level). The study conducted on a Buddhist monks meditating on generating compassionate love tended to exhibit increased coherence²¹. Another study of Zen monks found that the more advanced monks tended to have coherent heart rhythms, while novices did not. A study of long-term Buddhist practitioners, Lutz et al.²² report an increase in gamma band oscillation and long-distance phase synchrony when the practitioners generated a state of “unconditional loving-kindness and compassion”, suggesting that the increased gamma band oscillation reflects a change in the quality of moment-to-moment awareness. The characteristic patterns of baseline activity of this group were found to be different from a control group²³.

Coherence on a body level seems to be a reasonable proxy for consciousness as it is a concept measurable within a classical paradigm. Coherence is seen as an optimal psychophysiological state: a dynamic systems view of the interrelations between psychological, cognitive and emotional systems and neural communication networks in the human organism²⁴.


The feelings we experience as “negative” are indicative of body states in which “life processes struggle for balance and can even be chaotically out of control”²⁵. By contrast, the feelings we experience as “positive” actually reflect body states in which “the regulation of life processes becomes efficient, or even optimal, free-flowing and easy”²⁶. Research²⁷ has shown that positive emotions and attitudes, beyond the fact that it makes us feel pleasant, have a number of objective, interrelated benefits for physiological, psychological and social functioning. Coherence is a particular quality that emerges from the relations among the parts of a system or from the relations among multiple systems. The latter is particularly what we would measure in the organisational analysis using neural networks.

The most common definition of coherence is “the quality of being logically, integrated, consistent and intelligible”²⁸, as in a coherent argument. A related meaning is “a logical, orderly and aesthetically consistent relationship of parts”. If we refer to people’s thought (or speech) as coherent we say that the parts seem to fit together. They are not uttering meaningless nonsense, or presenting ideas that don’t make sense as a whole²⁹. Coherence, hence, refers to wholeness and a global order; out of the interaction of elements, a whole emerges. Coherence includes the idea of local freedom and global cohesion³⁰. Interestingly, in physics, the concept of coherence is also used to describe the interaction or coupling among different oscillating systems in which synchronization is the key idea in this concept. This definition of coherence perfectly fits our quantum ontological frame described earlier.

The HeartMath Institute has developed a theoretical framework and tool to visualize coherence inside the human brain/body system. Psychophysiology (central to their development) is concerned with the interrelations among the physiological, cognitive, and emotional systems and human behaviour. It is now evident that every thought, attitude, and emotion has a physiological consequence. In more specific terms, they examine the natural fluctuations in heart rate, known as heart rate variability (HRV). HRV is a product of the dynamic interplay of many of the body’s systems. Short-term (beat-to-beat) changes in heart rate are largely generated and amplified by the interaction between the heart and the brain.

Some authors have compared organisations to neural networks³¹. Maturana and Varela (1984) have observed that a biological colony reacts as a group, very much like a neural network (our brain) reacts. When a group is confronted with a problem, in parallel, different members of the group will be consulted who, in turn, then consult other members. Just as the brain has a learning capacity, biological colonies (companies) also show learning behaviour. Consciousness is the outcome of a learning process of interacting “agents” (employees). Connectionist systems (like neural networks are) are based on the assumptions that knowledge and eventually consciousness is built dynamically. Understanding organisations as an interacting living network of individuals, out of which certain qualities (like consciousness) emerge, creates the necessary framework for studying emergent processes in companies (like consciousness or coherence) using artificial neural networks³².

The link with the wider systems thinking approach of any research design – or organisational design for that matter – and, in particular, the systems qualities of neural networks can be summarised and understood as follows. Complex living systems, such as human beings, are composed of numerous interconnected, dynamic networks of biological structures and processes. The application of systems thinking in the life sciences has given rise to the understanding that the function of the human organism as an integrated whole is determined by the multi-level interactions of all the elements of the psychophysiological system. The elements influence one another in a network way, rather than through hierarchical or cause-to-effect relationships. Abundant evidence indicates that proper coordination and synchronization – i.e. coherent organization – among the different networks of any biological activity is critical for the emergence of higher-order functions.

The operationalisation of a “first person” research concept as consciousness – or, according to some other authors, a fifth dimension research concept as consciousness – needs to be developed further. 

** The contribution of Erna Oldenboom needs to be recognised. A more research oriented version of this contribution is under preparation under co-authorship.*

¹ Baets and Oldenboom, 2009.

² In the sense used here, it draws from Ken Wilber’s theories (Ken Wilber, 2000).

³ According to Prigogine (Nicolis G and Prigogine I, Exploring Complexity, Freeman, 1989; Prigogine I and Stengers I, Entre le Temps et L'éternité, Fayard, 1988)

⁴ Polkinghorne, 1990.

⁵ Sheldrake and Bohm, 1982.

⁶ See Baets, 2008, for a more contextual overview.

⁷ Susan Blackmore, 2005.

⁸ Bernard Baars, 1988 and 1997.

⁹ Francis Crick, 1994.

¹⁰ Paul Churchland, 1984, 1996.

¹¹ Patricia Churchland, 1986, 2002.

¹² Daniel Dennett, 1987, 1991, 1996, 2003.

¹³ Ned Block, 1997.

¹⁴ David Chalmers, 2004, 2009.

¹⁵ Hameroff et al, 1996, 1998, 1999.

¹⁶ Roger Penrose, 2002.

¹⁷ Baets, 2006.

¹⁸ Polkinghorn, 1990.

¹⁹ www.noetic.org.

²⁰ www.hearthmath.com.

²¹ Lehrer et al, 2003.

²² Lutz et al, 2004.

²³ More research on consciousness, coherence and body impact can be found on amongst others <http://www.mindandlife.org/>, and http://www.mum.edu/tm_research/welcome.html.

²⁴ www.hearthmath.com.

²⁵ Damasio, 2003.

²⁶ Damasio, 2003.

²⁷ Fredrickson, 2002; Isen, 1999.

²⁸ McCraty and Tomasino, 2006.

²⁹ Ho, 1998.

³⁰ Ho, 1998.

³¹ Khalfa, 1994; Caverni et al, 1991; Ehrlich et al 1993; Mat-urana and Varela, 1984.

³² Baets, 1998.

L I T E R A T U R E R E V I E W

BAARS B. (1988). *A cognitive theory of consciousness* (Cambridge: Cambridge UP).

— (1997). *In the theatre of consciousness* (Oxford: Oxford UP).

BAETS W. (1998). *Organizational Learning and Knowledge Technologies in a Dynamic Environment* (Dordrecht: KAP).

— (2006). *Complexity, Learning and Organizations: a quantum interpretation of business* (London: Routledge).

— (2008). "A-causality, consciousness and organizations", in Momo S. (ed.), *Consciousness & Development, SpandaNews 4*.

BAETS W. and OLDENBOOM E. (2009). *Rethinking growth: social intrapreneurship for sustainable performance* (New York: Palgrave).

BLACKMORE S. (2005). *Conversations on Consciousness* (Oxford: Oxford UP).

BLOCK N. (1997). *The nature of consciousness: Philosophical Debates* (Cambridge, MA: MIT Press).

CAVERNI J. P., BASTIEN C., MENDELSON P., TIGERGHEN G. (Eds). (1991). *Psychologie cognitive: Modeles et Methodes* (Grenoble : Presses Universitaires).

CHALMERS D. (2009). "The two-dimensional argument against materialism", in *McLaughlin B, Ed, Oxford Handbook of the Philosophy of Mind* (Oxford: Oxford UP).

— (2004). "How can we construct a science of consciousness?", in *Gazzaniga M, Ed, The Cognitive Neurosciences III* (Cambridge, MA: MIT Press).

CHURCHLAND P. (1986). *Neurophilosophy: towards a unified science of mind-brain* (Cambridge, MA: MIT Press).

— (2002). *Brainwise: studies in neurophilosophy* (Cambridge, MA: MIT Press).

— (1984). *Matter and Consciousness: a contemporary introduction to the philosophy of mind* (Cambridge, MA: MIT Press).

— (1996). *The engine of reason: the seat of soul* (Cambridge, MA: MIT Press).

CRICK F. (1994). *The astonishing hypothesis: the scientific search for the soul* (New York: Scribner).

DAMASIO A. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain* (New York: Mariner).

DENNETT D. (1987). *The intentional stanc* (Cambridge, MA: MIT Press).

— (1991). *Consciousness explained* (New York: Back Bay Books).

— (1996). *Darwin's Dangerous Idea: evolution and the meaning of life* (New York: Simon Schuster).

— (2003). *Freedom Evolves* (New York: Viking Adult).

EHRlich M. F., TARDIEU H., CAVAZZA M. (Eds). (1993). *Les Modeles Mentaux: Approche cognitive des representations* (Issy les Moulineaux: Masson).

HAMEROFF S., KACZNIAK A., CHALMERS D. (Eds). (1996). *Towards a Science of Consciousness I* (Cambridge, MA: MIT Press/Bradford Books).

— (1998). *Towards a Science of Consciousness II* (Cambridge, MA: MIT Press/Bradford Books).

— (1999). *Towards a Science of Consciousness III* (Cambridge, MA: MIT Press/Bradford Books).

HO M. (1998). *The rainbow and the worm: The physics of organisms* (Hackensack, NJ: World Scientific Publishing).

KHALFA J. (ed). (1994). *What is Intelligence* (Cambridge: Cambridge UP).

LEHRER P., VASCHILLO B., LU S., ECKBERG D., EDELBERG R., HAMER R. (2003). "Heart rate variability biofeedback increases baroreflex gain and peak expiratory flow", *Psychosomatic Medicine*, 65 (5), 796-805.

LUTZ A., GREISCHAR L., RAWLINGS N., RICARD M. AND DAVIDSON J. (2004). "Long term meditators self-induce high amplitude gamma synchrony during mental practice", *Proceedings of the National Academy of Sciences USA*, 101 (46): 16369-16373.

MAHARISHI UNIVERSITY OF MANAGEMENT, Fairfield, Iowa, http://www.mum.edu/tm_research/welcome.html.

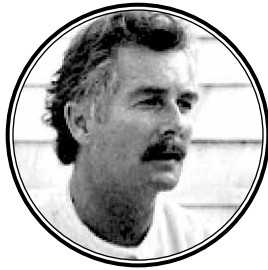
- MATURANA H. and VARELA F. (1984). *The tree of knowledge, The Biological Roots of Human Understanding* (Frankfurt: Scherz).
- MIND & LIFE INSTITUTE, Boulder, CA, <http://www.mindandlife.org/>
- NICOLIS G. and PRIGOGINE I. (1989). *Exploring Complexity* (New York: Freeman).
- PENROSE R. (2002). *The Emperor's New Mind: Concerning Computers, Minds and the Laws of Physics* (Oxford: Oxford UP).
- POLKINGHORNE J. (1990). *The Quantum World* (London: Penguin).
- PRIGOGINE I. and STENGERS I. (1988). *Entre le Temps et L'éternité* (Paris: Fayard).
- SHELDRAKE R. and BOHM D. (1982). "Morphogenetic fields and the implicate order", *ReVision*, 5:41-48.
- WILBER K. (2000). *A brief history of everything* (Ascot: Gateway).



EMBODIED MASTERY USING PHILOSOPHY

TO IMPROVE PERFORMANCE IN THE MARTIAL ART OF EVERYDAY LIFE

CHRISTIAN DE QUINCEY



Christian de Quincey, PhD, is Professor of Philosophy and Consciousness Studies at John F. Kennedy University and Dean of Consciousness Studies at the University of Philosophical Research. He is collaborating with international martial arts coach Rodney King, founder of Crazy Monkey Defense, to develop new programs in “Embodied Intelligence.” Dr de Quincey is founder of The Wisdom Academy, offering private mentorships in consciousness. His books include the award-winning Radical Nature: The Soul of Matter and Radical Knowing: Understanding Consciousness through Relationship. His latest books are Consciousness from Zombies to Angels and Deep Spirit: Cracking the Noetic Code. Samples of his writings on consciousness and cosmology are available at www.ChristiandeQuincey.com and TheWisdomBlog.com.

WHY ON EARTH WOULD ANYONE ENGAGED IN martial arts (a deeply embodied practice), be interested in the insights of philosophy (an “airy” mental practice)? And why would anyone in leadership, management, or business be interested in either philosophy or martial arts?

Well one good reason would be to explore how a philosophy of embodiment could help hone one’s “mental game” and improve performance whether on the mat or in the rest of life. *Process metaphysics* is just that – a philosophy of embodiment that can be applied in life, on the mat, on the street, in the home, or in the office.

A little over a year ago, I began collaborating with an international martial arts coach and successful entrepreneur, Rodney King, founder of Crazy Monkey Defense, to develop programmes for leaders and managers in any walk of life or business that involves stressful challenges. *And what doesn’t these days?* Besides training clients in fifteen countries across the world, Rodney works with special forces and law-enforcement to help them operate at peak performance in highly stressful circumstances. We both believe that blending profound philosophical insights with the embodied practice of martial arts can be adapted for any

individual or group who needs to perform optimally in challenging situations. This article is a result of that collaboration. While it focuses on enhancing performance in martial arts, the principles are universal and can be applied to any project that requires deep access to embodied intelligence.

Process philosophy grew out of the work of Alfred North Whitehead in the 20th century – particularly his major work *Process and Reality*. One of the most revolutionary ideas in Whitehead’s philosophy is that reality is made of “events” not things. *Process*, not substance, is fundamental. The science of quantum physics has discovered this, too.

Whitehead presented another revolutionary idea: Body and mind are related in the same way as past and present. And just as you never have a present without a past, you never have a mind without a body – or vice versa. In other words, every body comes ready-made with a mind, with its own innate, natural intelligence.

While Whitehead never practiced a martial art, his philosophy is one of the most effective ways for understanding the dynamics of martial arts mastery as the cultivation and practice of *embodied intelligence*.

Without getting bogged down in the details of his philosophy and his unusual use of language, martial artists can benefit from a basic understanding of how Whitehead’s key insights illuminate the process of embodied mastery. So, to become a “*process martial artist*,” it will help to become familiar with two of Whitehead’s core ideas.

Let’s begin with “*actual occasions*.” The main point to get here is that according to Whitehead, reality is not made up of static little objects (whether atoms or molecules). It is made up of *actions*. Everything that really exists, according to Whitehead, is an *actual occasion*. In other words, whatever *actually* exists is always a *moment* in an ongoing process – where each momentary “now” almost immediately becomes the past, and is replaced by a new moment of now. This is the universal *process* that creates everything in the world, and it’s made up of these “actual occasions.”

The next major, and revolutionary, idea from Whitehead is that every actual occasion is a moment of

experience. In other words, reality is not just a random process, it comes with consciousness or intelligence already built in, right from the start. Think of it this way: *Every process has a purpose*.

Everything that actually exists has *choice*. This is true whether the actual entity is you as a human being, a martial artist, or one of the cells or molecules in your body. At every moment, every actual occasion – every sentient being – has a choice among a range of possibilities. And every choice is always guided by some *aim* or purpose. Ultimately, the aim is to maximize the experience of satisfaction (joy or happiness). That’s what every body wants.

But within that general aim, every individual has many other subordinate “strategic aims,” intended to take us step by step toward a moment of satisfaction. Even though we are not always conscious of our aims, they are always present nevertheless. Most of the time, most of our aims are unconscious, below the threshold of conscious awareness. For example, since every cell in your body has its own aims and choices, these form a major portion of your embodied unconscious. You may not be aware of it, but your body teems with its own natural intelligence. Part of the training of an effective martial artist involves practices that help him or her become more aware of this natural embodied intelligence. Every choice we make has an impact that carries over to future moments. Every choice that you make as a human being affects other people and the world around you. Not only that, it also affects the cells of your body. Likewise, the choices made by your cells influence the choices you, as a human organism, make.

Process martial arts, then, is a way 1) to become aware of the two-way dialogue between the choices made by your body’s cells and the choices you make as a whole organism; 2) to master the “dance” between the aims and choices of your cells and *your* aims; and 3) to engage in a larger “dance” or “dialogue” between you and your environment, which includes other people with their own, often competing, aims – e.g., an opponent or adversary.

AIMS SHAPE WHO WE ARE

Okay, so what is your aim or purpose – how does it come about? How does any actual occasion (e.g., a human being like you) form an aim? From Whitehead’s philosophy, we can identify three kinds, or levels, of aims:

1 ~ EVOLUTIONARY AIM – The “initial aim” comes from the universe itself. Everything we do is influenced by the overall intentions of all other sentient

beings making their choices according to their own aims. Individuals and species succeed in evolution when they align their individual aims with the greater collective evolutionary aim.

2 ~ SOCIAL AIM – Every actual occasion (e.g., you) is influenced by all of the societies to which it belongs. As a martial artist, this means that your personal aim is influenced or conditioned by all of the groups to which you belong (family, community, country, etc.) and, in particular, by the shared aims of the group of people you practice with. The unified aim of the group empowers each of its practitioners.

3 ~ PERSONAL AIM – Even though our aims and choices are greatly influenced by the larger social and evolutionary aims, each of us always has the ability to make our own choices, guided by our own personal aims. *Our choices do make a difference*. Each personal choice works like a “trim-tab” (a small rudder attached to the larger rudder of a ship, which helps to fine-tune the movements of the ship). Likewise, each personal choice is small, but it can have disproportionate effects over time. The key phrase here is “over time.”

IMPORTANCE OF PRACTICE

We have little say in how the larger evolutionary and social aims are formed. We more or less simply inherit them from the environment and our social groups through a kind of “osmosis.” Despite their all-pervasive influence, however, we are not completely at the mercy of those “external” aims.

The key to successful performance in life, as on the mat, is cultivation of our personal aim. Yes, at every moment, we always start by inheriting all the previous aims that have shaped our personality (including the evolutionary and social aims, as well as our own past choices) – but we always have a “say” in how those aims are shaped as we pass them on. *We are always responsible for the choices we make*. And those choices affect not only the development of our own personality but also influence the aims and actions of other individuals.

Choice is guided by aim, and every aim is based on what we value. In order for our personal aims to make a difference and to achieve what we value (whether this is to become satisfied with our skill and ability to perform effective self-defense or to grow as integrated human beings), we have to find a way to carve a channel through the surrounding social and evolutionary aims.

We do this by exercising *choices* – over and over – aligned with our personal aims, thereby shaping the development of our future personality. Only through repeated *practice* can we amplify the power of personal

choice to burrow through and make a difference in the wider context of society and the wider ever-changing environment.

ELEMENTS OF MASTERY

INITIAL AIM. Practice starts with an initial intention or aim (inherited from our personal, social, and evolutionary past). However (except in rare cases), a single momentary decision is not likely to make a long-term change in our personal effectiveness.

As Aristotle famously said: “*One swallow does not a summer make [...] similarly one day or brief time of happiness does not make a person entirely happy.*” It takes multiple repetitions of focused choices to counteract the immense momentum or inertia of our inherited, habitual past.

REPEATED PRACTICE. Therefore, to counteract the surging tide of old habits, we need to reinforce new skills or habits by making the same choice over and over – e.g., to master a move in martial art. Repetition and practice lead to greater and greater power and results. Often, we also have to make a choice over and over again before it changes our mental attitude.

MAINTAINING MASTERY. Even after long periods of repeated practice, and mastery has been achieved, we still need to constantly maintain our standard of mastery through continued recreation of the original intention backed up with repeated further practice.

GROUP EFFECT. When a personal aim is practiced with a group of colleagues sharing the same aim, the collective power of the “social aim” amplifies the effect of the personal aim. Practicing together, therefore, is far more effective than practicing alone.

PRESENT CHOICE SOLIDIFIES (OR CHANGES) PAST HABITS. Every habit is the result of constantly repeated previous choices. If we want to change a habit, therefore, we need to frequently make alternative choices. Mastery in any field (business, the arts, sports, or martial arts) involves repeatedly making conscious choices in the present moment, over and over – either to change an old habit or to reinforce a desired attitude or action. In time, with practice, intention penetrates deep into unconscious memories stored in the body and leads to the development of a new automatic skill.

Another key element of mastery is cultivating expanded awareness. This is so important to developing an effective “mental game,” we’ll look at it in more detail.

EXPANDED AWARENESS

As we all know, things are not always what they seem. Much of philosophy is about distinguishing between “appearance” and “reality.” Likewise, effective performance, whether in life or on the mat, also involves paying attention to the difference between how things *seem* and what is *really* happening. The more we pay attention, the more we expand our awareness. And expanded awareness increases options for more choices.

To get a little technical for a moment, Whitehead talked of *appearance* as “presentational immediacy” (whatever our senses detect in the immediate, present moment) and *reality* as “causal efficacy” – all past actions that cause actual effects in the present. Appearance, then, is the *immediate* surface of things perceived by the senses; whereas reality involves the full *history* of prior actual events that have led up to (“caused”) the present moment.

By paying closer attention to how the world appears, we can penetrate beyond the surface appearances and see, or feel, deeper into the actual reality of the surrounding world – including what’s happening our own bodies. Beyond normal conscious awareness, our bodies are constantly picking up energy and information from other bodies in our environment. Every body is causally affecting every other body. *Your body registers the effects of what’s happening in your environment* – including the bodies of other people. In other words, you literally *feel* the presence and pressure of the world around you. This universal interconnectedness-through-feeling is the fundamental nature of reality.

Of course, most of the time, most of this deep embodied feeling is unconscious. Therefore, to penetrate beneath surface appearances involves cultivating the ability to feel, or intuit, the feelings and intentions of other beings in the environment. Paying attention to the unconscious intelligence of your own body is an effective way to enhance expanded awareness. Doing so requires mental discipline and focus.

This “mental game” involves learning to simultaneously pay attention to what we feel in our bodies (“causal efficacy”) *and* to whatever presents itself to our senses in the immediate, present environment (“presentational immediacy”). With this expanded awareness, we can choose to take actions that either align with and enhance our body’s unconscious, automatic responses or that inhibit or override them. In this way, we can choose to amplify our body’s natural intelligence or interrupt a habitual way of acting that doesn’t serve our current aim or purpose.

Viewing reality through the lens of process philosophy can be beneficial for all of us because it offers a radically different way of understanding and experiencing ourselves as embodied intelligent beings. We readjust our relationships between one another as individuals and with the wider world in which we are always embodied and embedded.

However, process philosophy is particularly valuable for people who use their bodies as vehicles for self-expression (e.g., athletes and dancers). The most dramatic shift in awareness involves what we could call “expanded embodiment” or, following some indigenous traditions, “the long body.”

One of the most important new ideas from process philosophy is the realization that our bodies do not end at the surface of our skin. As Taoist philosopher Alan Watts said: “We are not skin-encapsulated egos.”

According to process metaphysics, our bodies are formed, moment-by-moment, from the never-ending influx of past events (prior “actual occasions”) into the here and now. In fact, right now as you read this, the entire history of the universe is flowing into the particular point in space and time that is your body. The specific way the universe converges on this point creates “you” as an individual. Even though every body literally contains the entire history of the universe, each of us is unique because no two points in space-time are ever identical. Everybody has a unique perspective. And this individual perspective is just that – a *perspective*. That’s why the world shows up differently for each of us. Your perspective is different from mine, and everybody else’s. Each of us sees the world through our own unique window. All we ever perceive with our bodily senses is a limited slice of reality – an *appearance* (Whitehead’s “presentational immediacy”).

Nevertheless, the entire universe is present in our bodies – in fact, it *is* each body – as past reality flows into and converges on the “here and now” that is each of us as an individual. This is the process Whitehead calls “causal efficacy.” It’s the transmission of energy and information from the past into the present, and that’s what accounts for the phenomenon of memory and, indeed, for the fact that every moment is connected to its own past.

However, this continuity is not merely the transmission of energy through time. Every body literally *feels* the pressure of the past flowing into the present. What is *energy* from one perspective (the objective past flowing into the present) is *experience* from the opposite perspective (the subjective present feeling the impact of the past, right

now). *We literally feel the feelings of other bodies.* Indeed, that’s what energy is: It’s the *transmission of experience* in a process where one body feels the feelings, or *experiences the experiences*, of the other bodies around it. Our bodies, then, are antennas that “tune into” the experiences of others.

Because every body is composed of the entire past universe, in particular states of consciousness we can expand our body’s awareness to encompass everything around us. Of course, this requires developing a special, paradoxical, quality of focused attention and expanded awareness beyond our normal mental states.

A successful process martial artist, for example, develops an awareness that his or her body literally incorporates the other bodies around it. By feeling the feelings of other bodies, he has access to the aims and intentions of his opponents, and knows, unconsciously in his own body, what they intend to do in the next moment. The practitioner who more skillfully and deeply feels the embodied feelings of her opponents has a decisive advantage, and is more empowered to take charge of the situation.

EMBODIED INTELLIGENCE

All prior events transmit their effects (*energy*) into the present (“causal efficacy”). This pressure of the past on the present is also the transmission of embodied *experience* (from one actual occasion to the next). Since this happens at the level of cells and molecules – which, of course are so tiny, they don’t have any sense organs, such as eyes, ears, or noses – the transmission of experience is *extra-sensory* or *telepathic* (no sensory information is involved). Deeper awareness of the transmission of energy/experience at the cellular level is what most folks call “feeling” or “intuition,” and it gives the martial artist a greater ability to literally *feel* the opponent, and thus to anticipate his or her next moves. *Consciousness penetrates deeper into the body, allowing the martial artist to more effectively express his/her embodied intelligence.*

An alert and aware process master makes use of both modes of embodied intelligence. One, by paying sharp attention to *appearance* (“presentational immediacy”), he is aware of the other through the windows of his senses; and, two, by paying closer attention to his own embodied feelings, he *experiences the experiences* of the other (“causal efficacy”). He *expands his body*, and so gains direct access to the experiences, aims, and intentions of the other bodies around him (because they are now part of his extended body). A process master, then, knows what his opponents aim to do in the next moment, even before they do.

Embodied intelligence, therefore, can enter the practitioner's conscious awareness in two ways: as *perceptions* (e.g., images of the opponent's actions); or as a *felt* bodily sense (without sense perception) of what the opponent will do next.

By paying closer attention to subtle clues of her body (noticing how her energy and experience shift in concert with her opponent's – as one body feels what the other feels), the process martial artist both expands her present awareness (presentational immediacy) and gains deeper access to the unconscious embodied intelligence of the “expanded body” that includes self and other (causal efficacy). In short, unconscious intuition enters more and more into conscious awareness.

This dialogue between consciousness in the present and embodied intelligence flowing in from the past gives the process master a greater range of options for choice and action, accompanied by an expanded awareness of the wider circumstances, leading to appropriate choices for action.

Remember, though, your opponent is also doing his best to achieve his aims, too. Whether he is aware of it or not, he is also feeling your feelings, and this influences his actions. You are both engaged in a dance – an exchange of experiences and energy.

PROCESS MASTERY

Process mastery, then, depends as much on *psychological* qualities as on *physical* prowess or skill. That's why *attitude* is crucial in effective performance. From the process perspective, “attitude” depends on our aims, which incline us to view and take in the world in a particular way. For example, if our personal aim is dominated by self protection, that can lead us to respond to the world with fear – thus distorting its appearance and making intelligent choice less possible. Or, if our aim is dominated by aggression, we may see opponents where we could be seeing possible allies.

To aim at process mastery an attitude of openness to what is, which leads to a greater awareness of what is possible. True mastery in martial arts involves overcoming fear and aggression to achieve a kind of open, flexible response to incoming experiences. This open attitude is cultivated by aiming not at self-defense or victory, but rather at feeling the situation as deeply as possible, and responding naturally to the dynamism of what is.

Cultivate an attitude of open flexibility, and you will be less likely to inspire anger or fear in your opponent – thus opening up possibilities for the transmutation of conflict into cooperation. ☉





A CONSCIOUSNESS-BASED APPROACH TO ELIMINATING POVERTY

PETER GARETH WALLACE ~ DENNIS H. HEATON



Peter Gareth Wallace (left) completed his PhD in Management and Maharishi Vedic Science at Maharishi University of Management. His dissertation, on which this article is based, was inspired by his direct interactions with Maharishi Mahesh Yogi regarding principles and programs to create a world free from poverty. Email: garethwallace@gmail.com.

*Dennis P. Heaton (right) is Director of the PhD Program in Management at Maharishi University of Management in Fairfield, Iowa. His research interests include higher stages of human development and their implications for socially and environmentally responsible management. His recent publications include editorship of *Consciousness-Based Education: A Foundation for Teaching and Learning in the Academic Disciplines, Volume 8. Consciousness-Based Education and Management. Fairfield, IA: M.U.M. Press, 2011. Email: dheaton21@gmail.com.**

PREVIOUSLY IN 2008, THE SPANDA FOUNDATION published a special issue on *Development and Consciousness*. In that issue Russell connected the problems of society to our need to wake up to our true identity as *sat-chit-ananda*¹, as experienced by saints and mystics. Momo envisioned that humankind is already moving into a further state of consciousness characterized by enduring unity². And Lazlo identified the evolution of consciousness from the ego-bound to the transpersonal form “could produce greater empathy among people”, even “subtle contact with other parts of the cosmos”³. As Lazlo observed, various models depict our evolutionary potential for higher states of consciousness. In this article, we focus on a Vedic model of individual and collective consciousness that Maharishi Mahesh Yogi brought out as a Consciousness-Based approach to the elimination of poverty.

THE LEGACY OF MAHARISHI MAHESH YOGI

This paper presents selected principles from the analysis of Maharishi Mahesh Yogi’s thought in the dissertation of the first author⁴. Maharishi is known for being the founder of the Transcendental Meditation⁵ technique, which has been the subject of extensive research in physiology, psychology, and sociology⁶. Maharishi also brought out theoretical writings about government, economics, management, education, health, and defense based on traditional Vedic knowledge⁷. He revived and espoused practical programs from the Vedic tradition, including the TM-Sidhi program, Sthapatya Veda, Ayur Veda, Ghandharva Veda, and Jyotish. The system of theory and practice contributed by Maharishi during his lifetime has become known as Maharishi Vedic Science (MVS)⁸.

Maharishi drew connections between the cosmological views of his Vedic tradition and modern theoretical physics. Modern science conceives of a unified field underlying the ever-evolving order of the physical universe⁹. Vedic Science is a tradition of knowledge based on direct experience of a similarly conceived fundamental unity, “experienced as an eternal continuum underlying all existence” in “a completely unified, unbounded and simple state of awareness, called pure consciousness¹⁰.” In Maharishi’s analysis, the subjective experience of this state of Transcendental Consciousness enlivens in the mind the creative and dynamic qualities of nature’s intelligence for practical success. Development of individual and collective consciousness enhances alertness, creativity, and support of nature (good fortune) and these are the means to imaginatively conceive of and effectively execute on opportunities for progressing toward holistic well-being and fulfillment. Wealth comes from creativity. Because human creativity is potentially unlimited, so also the creation of abundance and fulfillment is potentially without limit¹¹.

THE PRINCIPLE OF FULLNESS

A verse from the Upanishads, an aspect of Vedic literature, identifies infinite consciousness as the non-material source of the material world, and suggests how consciousness can be the source of humanity’s power to eliminate poverty.

पूर्णमदः पूर्णमिदं पूर्णात्पूर्णमुदच्यते
पूर्णस्य पूर्णमादाय पूर्णमेवावशिष्यते

*Pūrṇam adaḥ pūrṇam idaṁ pūrṇāt pūrṇam udachyate
pūrṇasya pūrṇam ādāya pūrṇam evāvashishyate
(Bṛihad-Āraṇyak Upanishad, 5.1)*

That is full; this is full. From fullness, fullness comes out.
Taking fullness from fullness, what remains is fullness.

The verse expresses the insight of the Vedic seer that inner fullness is the inexhaustible source of creativity. The created world (that) is a manifestation of the fullness of consciousness (this)¹². This insight is not just a philosophical stance; it is a personal realization in the life of the seer¹³. The seer enjoys a higher state of consciousness in which he knows his own inner Being to be this fullness, and furthermore he apprehends the world around him in terms of that same fulfilling absolute quality. The verse depicts the fulfillment of development economics as the state of enlightenment in which all aspects of inner and outer life are enjoyed as being absolutely full. In such a state, the notion of poverty – of lack, need, deficiency, deprivation, and suffering – is eliminated. This realization is captured in another verse from the Upanishads, which translates as “I am totality¹⁴”.

अहं ब्रह्मास्मि

Ahaṁ Brahmāsmi (Bṛihad-Āraṇyak Upanishad 1.4.10)

Elimination of poverty means enjoying inner fullness as well as outer fullness.

Maharishi stated, “If the field of economics is limited to creation of material abundance alone, it would appear to defeat its own purpose¹⁵”. A person may have material affluence but lack permanent inner peace and happiness. So, “To bring about this permanent contentment is the final aim of economics. Therefore, it appears the field of economics should not be restricted to material production and consumption alone, but should be extended to bring about the means of greatest happiness of a permanent nature in everyone’s life¹⁶”.

Development of consciousness contributes to economic development by providing experience of growing inner fulfillment as well as unfolding increasing potential for achieving outer success. “From fullness, fullness comes out” encompasses both the realization of inner fulfillment in Transcendental Consciousness and the creation of balanced sustainable livelihood from the enlivenment of inner consciousness. MVS explains that “underutilization of human resources, failure to make full use of the infinite creative potential of human

consciousness, causes all economic problems, such as poverty and low productivity¹⁷.” On the other hand,

The most precious possession of a nation is the human brain, a cosmic computer that can produce anything through proper programming. Proper programming of brain functioning is available through the Technology of the Unified Field. With the millions of cosmic computers available in the brains of their people, and with the availability of the Technology of the Unified Field, there is no reason why any nation should ever suffer from scarcity¹⁸.

The term Unified Field is used in MVS to draw a connection between the understanding and experience of Transcendental Consciousness and an underlying unity of force and matter fields theorized by modern physics. What is referred to here as the Technology of the Unified Field is the Transcendental Meditation and TM-Sidhi programs. The TM program enables the mind to transcend active thinking and experience the quiet fullness of a “state of inner wakefulness with no object of thought or perception, just pure consciousness aware of its own unbounded nature¹⁹.” The Transcendental Meditation (TM) technique is said to make the experience of Transcendental Consciousness accessible through an effortless practice that is “independent of all matters of belief and affiliation²⁰.” The TM-Sidhi program, an advanced meditation practices based on the Yoga Sutras of Patanjali, is said to enliven the Unified Field in the conscious mind and make the total potential of Natural Law and its infinite organizing power available in practical life. One aspect of the TM-Sidhi program is called Yogic Flying, an experience which stabilizes the unboundedness of Transcendental Consciousness throughout the performance of dynamic activity.

The TM technique has been taught in a consistent manner around the world and thus has lent itself to scientific study of both of the effects on mind and body during meditation and on the enduring effects outside of meditation as the result of repeated practice²¹. For the purposes of this article on consciousness and poverty elimination, findings such as increased creativity, reduced anxiety, and growth of ego development are interpreted as providing empirical support for the Vedic Principle of Fullness.

Here are some highlights from the extensive research on this meditation technique. During the practice of the TM technique there are reductions in heart rate and oxygen consumption, and increased electroencephalographic (EEG) coherence indicative of a state of profound restful alertness, distinct from eyes-closed relaxation or sleep²². The profound relaxation gained during the practice is said to dissolve

the stress in the mind and the body. The TM technique has been associated with improvements such as reduced health insurance utilization^{23,24}, improvements in ego development and moral reasoning²⁵, creativity²⁶, fluid intelligence, constructive thinking, and reaction time^{27,28}. Statistical meta-analyses have found the Transcendental Meditation technique to be more effective than other forms of meditation and relaxation in reducing anxiety²⁹, improving psychological health and maturity as measured by the growth of self-actualization³⁰, and reducing tobacco, alcohol, and drug use³¹. These aspects of positive psychological growth enable improved performance and achievement as well. There has been research associating the TM technique to business success³² and some preliminary tests of a Consciousness-based approach to poverty reduction in South Africa³³. More connections of this Principle of Fullness and of TM practice to economic development in conditions of poverty can be explored through further research.

THE PRINCIPLE OF SUPPORT OF NATURE

The relationship of inner development of consciousness to outward success is further illuminated by another key Vedic verse in Maharishi's exposition. The verse is:

यतीनां ब्रह्मा भवति सारथिः

Yatīnām Brahmā bhavati sārathiḥ (R̥k Veda 1.158.6)

For those who are established in the singularity of fully awake, self-referral consciousness, the infinite organizing power of Natural Law becomes the charioteer of their action³⁴.

This verse expresses the Vedic Principle of Support of Nature. Support of Nature is defined as the phenomenon in which one experiences that desires are more easily fulfilled and success more easily achieved when one is enjoying a state of consciousness that is settled and yet wide awake. This is in essence a transpersonal theory of management in which the agency of Nature or Natural Law is instrumental in orchestrating fortunate results.

The book *Maharishi University of Management: Wholeness on the Move* elaborates on the theory that success in management rests primarily on harmonizing the individual with the managing intelligence of Natural Law. Natural Law is here defined as “that infinite organizing power which sustains existence and promotes the evolution of everything in the universe, automatically maintaining the well-coordinated relationship of everything

with everything else³⁵.” Maharishi called for education to cultivate higher individual consciousness that “maintains the managing intelligence of the manager in alliance with this supreme managing intelligence of the universe³⁶” so that it is ultimately possible to attain “administration as automatic, problem-free, ever-progressive, and ever-evolutionary as the administration of the universe through Natural Law³⁷.” In his view, the explicit aim of education is enlightenment, where enlightenment is defined as “the natural ability to think and act in accordance with natural law³⁸.”

It is interestingly to look into the theoretical understanding of how the individual mind can engage the managing intelligence of Nature. In MVS, self-referral means consciousness conscious of itself. Existence is pervaded by self-referral consciousness; it is the medium in which all aspects of creation are connected to each other. Self-referral consciousness is also an experiential reality when the conscious mind transcends thought in meditation and is conscious only of its own unbounded existence. In this state, called *Yoga* or union in the Vedic tradition, an intimate connection is established between the individual mind and the self-referral intelligence that pervades nature and is the home of all the laws of nature. As that linkage becomes established, the individual mind gains the support of the whole environment to respond favorably to the intentions of the mind. In this way, Support of Nature enhances empowerment and productivity, which directly impacts economic growth to remove poverty.

Maharishi pointed out a related verse from the Vedic literature that conveys the notion that outer material success is supported by inner spiritual development.

क्रियासिद्धिः सत्त्वे भवति महतां नोपकरणे

Kriyāsiddhiḥ sattve bhavati mahatām nopakaraṇe

Success comes from *Sattwa* (purity) – pure, self-referral consciousness – which being the source of everything contains within itself all that is needed for the fulfillment of any desire³⁹.

Maharishi provided another translation of this Vedic proverb: “The action of great men gains success through *Sattwa* – purity of consciousness – and not from the (external, or intellectually conceived, or physically organized) means of action⁴⁰.” Maharishi refers to higher states of consciousness as a permanent state of *Sattwic* consciousness⁴¹. An individual that has attained *Sattwic* consciousness has attained a state of permanent self-sufficiency. Maharishi stated, “The reality is that the means gather around *Sattwic* intelligence – Natural Law favours *Sattwic* consciousness – and whatever is required comes⁴².”

Maharishi further explained that inadequate education results in “violation” of Natural Law. Violation of Natural Law refers to behaviour that predominantly affects the individual and his environment in a destructive versus constructive way. Without being educated to spontaneously think and act in accord with Natural Law, man unwittingly violates Natural Law and suffers in consequence⁴³. Maharishi explained: “As soon as we violate natural law we are set right, and all the pains, all problems, all failure, all misery, result from this one fact – violation of natural law⁴⁴.” By the principle “as you sow, so shall you reap,” individual action affects an equal and opposite reaction, termed *Karma*:

That action and reaction are equal is a scientific established truth. You react to someone in a certain way and he, in turn, will react to you in a similar way. If he does not react to you, then nature will bring to you a similar type of reaction. If you hurt someone, even if he himself does not react, other agencies of nature will bring the reaction of your behavior to you. It is a law of nature that as you sow, so you reap. In whatever way one wants the surroundings to react to him, his behavior toward the surroundings must be in accordance with that⁴⁵.

The Technology of the Unified Field contributes to the elimination of poverty and suffering in society by training the mind to function in accord with all the Laws of Nature. Maharishi explains that through this training:

We get ourselves out of that unfortunate situation which brings to us all kinds of difficulties, sicknesses, and suffering in life. All these negative values result from not knowing how to be spontaneously orderly and evolutionary, not knowing how to think and act according to the laws of nature⁴⁶.

THE PRINCIPLE OF COHERENCE

Maharishi Vedic Science argues that as the individuals in a nation gain more purity through the regular experience of pure consciousness and the development of higher states of consciousness, then the collective consciousness of firms, communities, and the nation becomes more integrated, coherent, and invincible. The relationship between coherence of consciousness and collective destiny is brought out in a Vedic verse:

तत्सन्निधौ वैरत्यागः

Tat-sannidhau vairatyāgaḥ (Yoga-Sūtra 2.35)

In the vicinity of Yogic influence – unifying influence, integrating influence, coherent and harmonious influence – conflicting tendencies do not arise⁴⁷.

The problems of society – violence, poverty, disease, and disasters – are in inverse relationship to the degree of coherence in the collective consciousness. And the development of individual and collective consciousness leads to reduction of poverty and other societal problems. The following

paragraphs explain further the theory from MVS about the primacy of collective consciousness in national development, and evidence of the profound impact of coherence creating groups utilizing technologies of consciousness to influence public affairs.

Certainly the integrity and effectiveness of government institutions is a factor in eliminating poverty. According to MVS, the functioning of government is a reflection of national consciousness. *Maharishi's Absolute Theory of Government* states, “Government is the pure and innocent mirror of the nation, faithfully reflecting whatever is presented to it⁴⁸.” The judgments and decisions of government leaders, whether just or corrupt, are directed by the collective consciousness of their constituents. Maharishi stated: “Although the members of every government have their own individuality and their own opinions of the nation’s needs, while engaged in the process of governing, their actions are determined by factors beyond their personal lives – by the collective destiny of the nation⁴⁹.”

In order to improve the performance of government and to eliminate negative trends in society, Maharishi advocated coherence creating groups practicing the Transcendental Meditation and TM-Sidhi programs together in a group. Coherent collective consciousness establishes a foundation for effective administration by a government, free from corruption and criminality; and this can be achieved by creating an indomitable influence of coherence in national consciousness through a sufficient number of Yogic Flyers⁵⁰. MVS predicts that when such groups are of sufficient size, they can produce measurable changes in the harmony and orderliness of a nation, region, or the whole world. With the increase of collective consciousness, the nation, government, and institutions will perform action in alignment with Natural Law, bringing the support of nature to the nation. Such a rise in coherent, integrated collective consciousness will increase positive trends such as peace and prosperity and decrease negative trends such as conflict and poverty throughout the nation.

The theory that large coherence creating groups practicing the TM -Sidhi program can measurably influence the national economy and other indicators of quality of collective life has been tested by statistical analyses^{51,52}. Prospective social experiments have been conducted to test the theoretical proposition that a small proportion of the members of society, through group practice of the Transcendental Meditation and TM -Sidhi Program, including Yogic Flying, could measurably reduce negative indicators and increase positive indicators of quality of life in society. Notable

studies have included an experiment to test the impact of these procedures in the context of political violence in the Middle East⁵³ and a demonstration project to reduce urban crime in Washington, DC⁵⁴. Such evidence supports the Principle of Coherence, which posits that the development of collective consciousness underlies positive societal developments toward elimination of poverty.

CONCLUSION

The present article has contributed to the theme of development and consciousness, about which other authors have also shed light, by focusing on three principles from our analysis of Maharishi Mahesh Yogi's thought:

1. The Principle of Fullness highlighted experience of inner fulfillment in Transcendental Consciousness and creation of balanced sustainable livelihood from the enlivenment of inner alertness and creativity.
2. The Principle of Support of Nature argued that good fortune is attracted by purity of life, whereas problems result from thinking and action which are out of harmony with Natural Law. Fulfillment of desires can become more and more effective and effortless through cultivating the ability to perform from the ground of Transcendental Consciousness, which MVS equates with the Unified Field of Natural Law.
3. The Principle of Coherence introduced the concept of collective consciousness as the prime mover of the government and the measurable effects of coherence creating groups on indicators of societal well-being.

The persistence of poverty for so many in the world calls for consideration of new understandings about the cause of poverty and the fundamental means of its removal. In Maharishi view, the foundation for removing poverty is the development of higher consciousness capable of spontaneously thinking and behaving in accord with Natural Law:

Basing the economy of the nation on the level of currency regulation or distribution of wealth, hanging on the either communist or capitalist ideals of economy or to any other system of economy – all these are too superficial to achieve fulfilling economy. With the unified field based [Consciousness-Based] system of economic excellence, people will work less and accomplish more. There will be greater efficiency, more production, and more national productivity through increased creativity and proficiency in that style of functioning which is the functioning of nature⁵⁵. ◉

¹ Russell 2008, "The Evolution of Consciousness."

² Momo 2008, "Transformation is Gearing Up, Gathering Pace".

³ Lazslo 2008, "The Current and Next Evolution of Human Consciousness": 9.

⁴ Wallace 2004, *Development Economics Based On Natural Law*.

⁵ Transcendental Meditation program, Transcendental Meditation technique, TM-Sidhi program, Consciousness-Based, and Maharishi Vedic Science are registered or common law trademarks licensed to Maharishi Vedic Education Development Corporation and used with permission.

⁶ Rosenthal 2011. *Transcendence: Healing and Transformation through Transcendental Meditation*.

⁷ A catalogue of writings by Maharishi and by other authors inspired by Maharishi's work can be found at <http://www.mumpress.com/maharishi-books.html>.

⁸ Maharishi Mahesh Yogi 1995b, *Maharishi Vedic University Introduction*.

⁹ Hagelin 1987, "Is Consciousness the Unified Field? A Field Theorist's Perspective".

¹⁰ Chandler 1987, "Modern Science and Vedic Science: An introduction": 8.

¹¹ Maharishi 1986, *Life Supported by Nature Law*.

¹² Maharishi 1995a, *Maharishi University of Management: Wholeness on the Move*.

¹³ Chandler 1987, "Modern Science and Vedic Science: An Introduction".

¹⁴ Maharishi Mahesh Yogi 1997, *Celebrating Perfection in Education*: 74.

¹⁵ Maharishi Mahesh Yogi 1963/2001, *The Science of Being and Art of Living*: 211.

¹⁶ *Ibid*: 210-211.

¹⁷ Maharishi International University 1989, *Creating Heaven on Earth through Maharishi's Vedic Science and Technology*: 20.

¹⁸ Maharishi Mahesh Yogi 1986, *Life Supported by Nature Law*: 125.

¹⁹ Maharishi Mahesh Yogi 1976, *Creating an Ideal Society*: 123.

²⁰ Shear 2006, "Transcendental Meditation": 47.

²¹ Rosenthal 2011, *Transcendence: Healing and Transformation through Transcendental Meditation*.

²² Alexander, Cranson, Boyer & Orme-Johnson 1986, "Transcendental Consciousness".

²³ Orme-Johnson 1987, "Medical Care Utilization and the Transcendental Meditation Program".

²⁴ Herron, Hillis, Mandarino, Orme-Johnson & Walton 1996, "Reducing Medical Costs: The Impact of the Transcendental Meditation Program on Government Payments to Physicians in Quebec".

²⁵ Chandler, Alexander & Heaton 2005, "Transcendental Meditation and Postconventional Self-Development: A 10-Year Longitudinal Study".

²⁶ Travis 1979, "The TM Technique and Creativity: A Longitudinal Study of Cornell University Undergraduates".

²⁷ Cranson, Orme-Johnson, Gackenbach, Dillbeck, Jones & Alexander 1991, "Transcendental Meditation and Improved Performance on Intelligence-Related Measures: A Longitudinal Study".

²⁸ So & Orme-Johnson 2001, "Three Randomized Experiments on the Longitudinal Effects of the Transcendental Meditation Technique on Cognition".

²⁹ Eppley, Abrams & Shear 1989, "Differential Effects of Relaxation Techniques on Trait Anxiety: A Meta-Analysis".

³⁰ Alexander, Rainforth & Gelderloos 1991, "Transcendental Meditation, Self-Actualization, and Psychological Health: A Conceptual Overview and Statistical Meta-Analysis".

³¹ Alexander, Robinson & Rainforth 1994, "Treating and Preventing Alcohol, Nicotine, and Drug Abuse Through Transcendental Meditation: A Review and Statistical Meta-Analysis".

³² Schmidt-Wilk, Alexander & Swanson 1996, "Developing Consciousness in Organizations: The Transcendental Meditation Program in Business".

³³ Heaton 2008, "An Innovative Model of Management Education for the Poor: The South African Experience".

³⁴ Maharishi Mahesh Yogi 1995a, *Maharishi University of Management: Wholeness on the Move*: 5.

³⁵ *Ibid*: 8.

³⁶ *Ibid*: 8.

³⁷ *Ibid*: 8.

³⁸ Maharishi Mahesh Yogi, 1995b, *Maharishi Vedic University Introduction*: 113-115.

³⁹ Maharishi Mahesh Yogi 1995a, *Maharishi University of Management: Wholeness on the Move*: 173.

⁴⁰ Maharishi Mahesh Yogi 1997, *Celebrating Perfection in Education*: 166.

⁴¹ Maharishi Mahesh Yogi 1995a, *Maharishi University of Management: Wholeness on the Move*: 109.

⁴² *Ibid*: 109.

⁴³ Maharishi Mahesh Yogi, 1986, *Life Supported by Natural Law*.

⁴⁴ Maharishi Mahesh Yogi 1978, *Enlightenment to Every Individual and Invincibility to Every Nation*: 99.

⁴⁵ Maharishi Mahesh Yogi 1963/2001, *The Science of Being and Art of Living*: 72.

⁴⁶ Maharishi Mahesh Yogi 1986, *Life Supported by Natural Law*: 97.

⁴⁷ Maharishi Mahesh Yogi 1995c, *Maharishi's Absolute Theory of Defence*: 11.

⁴⁸ Maharishi Mahesh Yogi 1995d, *Maharishi's Absolute Theory of Government*: 61.

⁴⁹ *Ibid*: 62-63.

⁵⁰ *Ibid*: 63-64.

⁵¹ Cavanaugh & King 1988, "Simultaneous Transfer Function Analysis of Okun's Misery Index: Improvement in the Economic Quality of Life through Maharishi's Vedic Science and Technology of Consciousness".

⁵² Dillbeck, Cavanaugh, Glenn, Orme-Johnson, & Mittlefehldt 1987, "Consciousness as a Field: The Transcendental Meditation and TM-Sidhi program and Changes in Social Indicators."

⁵³ Orme-Johnson, Alexander, Davies, Chandler, & Larimore, 1998, "Peace Project in the Middle East: Effects of the Maharishi Technology of the Unified Field".

⁵⁴ Hagelin, Rainforth, et al., 1993, "Effects of Group Practice of the Transcendental Meditation program on Preventing Violent Crime in Washington DC: Results of the National Demonstration Project, June-July, 1993".

⁵⁵ Maharishi Mahesh Yogi 1986, *Life Supported by Natural Law*: 126.

REFERENCES

ALEXANDER, C.N., CRANSON, R.W., BOYER, R., ORME-JOHNSON, D.W. (1986). "Transcendental Consciousness: A fourth State of Consciousness beyond Sleep, Dreaming and Waking", in J. Gackenbach (ed), *Sourcebook on Sleep and Dreams*: 282-315 (New York: Garland).

ALEXANDER, C.N., RAINFORTH, M.V., GELDERLOOS, P. (1991). "Transcendental Meditation, Self-Actualization,

and Psychological Health: A conceptual Overview and Statistical Meta-analysis", *Journal of Social Behavior and Personality* 6(5): 189-247.

ALEXANDER, C.N., ROBINSON, P., RAINFORTH, M.V. (1994). "Treating and Preventing Alcohol, Nicotine, and Drug Abuse through Transcendental Meditation: A Review and Statistical Meta-analysis", *Alcoholism Treatment Quarterly* 11(1-2): 13-88.

CAVANAUGH, K.L. & KING, K.D. (1988). "Simultaneous Transfer Function Analysis of Okun's Misery Index: Improvement in the Economic Quality of Life through Maharishi's Vedic Science and Technology of Consciousness", *Proceedings of the American Statistical Association*: 491-496.

CHANDLER, H.M., ALEXANDER, C.N., HEATON, D.P. (2005). "Transcendental Meditation and Postconventional Self Development: A 10-year Longitudinal Study", *Journal of Social Behavior and Personality* 17: 93-121.

CHANDLER, K. (1987). "Modern Science and Vedic Science: An Introduction", *Modern Science and Vedic Science* 1: 5-28.

CRANSON, R.W., ORME-JOHNSON, D.W., GACKENBACH, J., DILLBECK, M.C., JONES, C.H., ALEXANDER, C.N. (1991). "Transcendental Meditation and Improved Performance on Intelligence-related Measures: A Longitudinal Study", *Journal of Personality and Individual Differences* 12: 1105-1116.

DILLBECK, M.C., CAVANAUGH, K.L., GLENN, T., ORME-JOHNSON, D.W., & MITTFELHLDT, V. (1987). "Consciousness as a Field: The Transcendental Meditation and TM-Sidhi Program and Changes in Social Indicators", *The Journal of Mind and Behavior* 8: 67-104.

EPPLEY, K.R., ABRAMS, A.I., SHEAR, J. (1989). "Differential Effects of Relaxation Techniques on Trait Anxiety: A Meta-Analysis", *Journal of Clinical Psychology* 45(6): 957-74.

HAGELIN, J.S. (1987). "Is Consciousness the Unified Field? A Field Theorist's Perspective", *Modern Science and Vedic Science* 1: 29-88.

HAGELIN, J. S., RAINFORTH, M. V., ORME-JOHNSON, D. W., CAVANAUGH, K. L., ALEXANDER, C. N., SHATKIN, S. F., DAVIES, J. L., HUGHES, A. O. & ROSS, E. (1999). "Effects of Group Practice of the Transcendental Meditation program on Preventing Violent Crime in Washington D.C.: Results of the National Demonstration Project, June-July, 1993", *Social Indicators Research* 47: 153-201.

HEATON, D.P. (2008). "An Innovative Model of Management Education for the Poor: The South African Experience", *Journal of Management Education* 32(6): 738-749.

HERRON, R.E., HILLIS, S.L., MANDARINO, J.V., ORME-JOHNSON, D.W., WALTON, K.G. (1996). "Reducing Medical Costs: The Impact of the Transcendental Meditation Program on Government Payments to Physicians in Quebec", *American Journal of Health Promotion* 10(3): 206-216.

LAZSLO, E. (2008). "The Current and Next Evolution of Human Consciousness", *Spanda News* II(4): 7-9.

MAHARISHI INTERNATIONAL UNIVERSITY. (1989). *Creating Heaven on Earth through Maharishi's Vedic Science and Technology: Theory and Practical Application from the Perspective of All Disciplines* (Fairfield, Iowa: MIU Press).

- MAHARISHI MAHESH YOGI (1963/2001). *The Science of Being and Art of Living*. (5th ed.) (New York, NY: Penguin Group).
- (1976). *Creating an Ideal Society* (Rheinweiler: Maharishi European Research University Press).
- (1978). *Enlightenment to Every Individual and Invincibility to Every Nation* (Rheinweiler: Maharishi European Research University Press).
- (1986). *Life Supported by Natural Law* (Fairfield, IA: Maharishi International University Press).
- (1995a). *Maharishi University of Management: Wholeness on the Move* (Vlodrop: Maharishi Vedic University Press).
- (1995b). *Maharishi Vedic University Introduction* (India: Age of Enlightenment Publications).
- (1995c). *Maharishi's Absolute Theory of Defence*. (3rd ed.) (India: Age of Enlightenment Publications).
- (1995d). *Maharishi's Absolute Theory of Government*. (2nd ed.) (India: Age of Enlightenment Publications).
- (1997). *Celebrating Perfection in Education* (India: Age of Enlightenment Publications).
- MOMO, S. (2008). "Transformation is Gearing Up, Gathering Pace", *Spanda News* II(4): 2-3.
- ORME-JOHNSON, D.W. (1987). "Medical Care Utilization and the Transcendental Meditation Program," *Psychosomatic Medicine* 49: 493-507.
- ORME-JOHNSON, D. W., ALEXANDER, C. N., DAVIES, J. L., CHANDLER, H. M., & LARIMORE, W. E. (1988). "Peace Project in the Middle East: Effects of the Maharishi Technology of the Unified Field", *Journal of Conflict Resolution* 32: 776-812.
- ROSENTHAL, N. (2011). *Transcendence: Healing and Transformation through Transcendental Meditation* (New York: Tarcher).
- RUSSELL, P. (2008). "The Evolution of Consciousness", *Spanda News* II(4): 3-6.
- SCHMIDT-WILK, J., ALEXANDER, C.N., SWANSON, G.C. (1996). "Developing Consciousness in Organizations: The Transcendental Meditation Program in Business", *Journal of Business and Psychology* 10: 429-444.
- SHEAR, J. (2006). "Transcendental Meditation", in J. Shear (Ed.), *The Experience of Meditation: Experts Introduce the Major Traditions*: 23-48 (St. Paul, MN: Paragon House).
- SO, K.T. & ORME-JOHNSON, D.W. (2001). "Three Randomized Experiments on the Longitudinal Effects of the Transcendental Meditation Technique on Cognition", *Intelligence* 29: 419-440.
- TRAVIS, F. (1979). "The TM Technique and Creativity: A Longitudinal Study of Cornell University Undergraduates", *The Journal of Creative Behavior* 13: 169-180.
- WALLACE P.G. (2004). *Development Economics Based on Natural Law: A Comprehensive Solution to the Five Faces of Poverty through the Principles of Maharishi's Program to Eliminate Poverty in the World*. Doctoral Dissertation (Fairfield, IA: Maharishi University of Management).





THE CONSCIOUS ORGANIZATION:

WORKPLACE FOR THE SELF-ACTUALIZED

JOHN RENESCH



John Renesch is a San Francisco businessman-turned-futurist whose work focuses on challenging the way we think about leadership, work and the future. He has published 14 books, including his latest, The Great Growing Up: Being Responsible for Humanity's Future, and hundreds of articles worldwide. He publishes a free monthly newsletter called John Renesch's Mini-Keynote and is a guest blogger on "Exploring the Better Future" for the Global Dialogue Center. He serves on the board of Shaping Tomorrow's Foresight Network and was its inaugural chair. He is a member of the practitioner faculty for the Center for Leadership Studies, advisor to the Global Alliance for Transformational Entertainment (G.A.T.E.), past member and project advisor for the World Future Society and a founding Fellow of the international consortium The Global Collaborators' Alliance. He is an accomplished international keynote speaker and has addressed audiences throughout the world. Website www.renesch.com; email: john@renesch.com.

A BRAHAM MASLOW'S FAMOUS HIERARCHY OF Needs defines "self-actualization" as a state sought by all human beings once we have satisfied the more basic needs of survival, sexual gratification and belonging. Carl Rogers, one of the founders of humanistic psychology, defines it as man's tendency to actualize himself, to become his potentialities. As we humans continue to evolve toward self-actualization there will be a concurrent need for our organizations to follow suit.

In the 1980s, in his seminal book *The Global Brain*, British futurist Peter Russell pointed out the coming "Age of Consciousness" – an era when reaching our full potentiality as human beings is much more the focus of our collective energies than at present – largely survival, conflict and consumption. As this emerging focus becomes more widely recognized and people continue on their individual paths toward self-actualization, the enterprises, institutions and companies where they come together to work will be changing dramatically. If they don't, the fate of these organizations is simple: they will die because people who are becoming self-actualized won't want to work in them. Organizations that

wish to attract more enlightened workers will need to transform their cultures and work environments so that they are more conscious, purging themselves of the existing dysfunction so prevalent in today's work environments. I call this "the conscious organization."

WHAT IS THE CONSCIOUS ORGANIZATION?

The Conscious Organization is not an end state where every worker is "certified" self-actualized or enlightened, where each and every element of the company, division, bureau, agency or institution is spotlessly cleaned of any residual dysfunction. The Conscious Organization is one that is continually examining itself, committed to becoming as self-aware and responsible as it can at any given time in its life. It purposely creates a very low tolerance for dysfunction. It possesses the collective will to be vigilant about unresolved issues that might fester under the surface of awareness or otherwise go unnoticed like they might in most organizations today.

Most of our existing organizations, including our corporations, endure some degree of bureaucracy – where the focus is more on the internal pathologies of their workers and less on the needs of their customers. Most organizations have developed a tolerance for certain shadows or dark behaviours that detract from them being as effective and vital as enterprises and workplaces. They have become resigned to this less-than-fully-functional state as "the best they can do under the circumstances," a condition that gives rise to mediocrity and low morale.

Conscious Organizations, or anyone involved with them, will more quickly recognize an unwanted quality, procedure, practice or other element of its culture because it has built-in vigilance for that which is not conscious. This vigilance is explicitly part of its culture. Once recognized, a rallying cry goes out and the organization's resources are marshalled toward "cleaning up" that area and making it more conscious. This could be compared to how the human body's immune system responds to an infection or any invading toxic agent.

So what do I mean by "conscious" in this context? Becoming conscious is becoming aware of something then acting responsibly in light of the new awareness.

It is not synonymous with awareness alone; it involves both. To paraphrase a Japanese proverb, awareness without action is a waste of time. Knowing something is wrong or can be improved upon without doing anything about it can also be painful.

Pinning down an exact definition of this ineffable human characteristic may be impossible, but let's see how the dots show up so we can agree on a general common understanding. Let's start with dictionaries.

Here is *Merriam-Webster's* definition:

- a: the quality or state of being aware especially of something within oneself;
- b: the state or fact of being conscious of an external object, state, or fact;
- c: awareness; *especially* : concern for some social or political cause.

The *International Dictionary of Psychology* defines it thusly:

Consciousness: the having of perceptions, thoughts and feelings; awareness. The term is impossible to define except in terms that are unintelligible without a grasp of what consciousness means [...] Nothing worth reading has been written about it.

Behavioural Brain Sciences journal states:

Consciousness is like the Trinity; if it is explained so that you understand it, it hasn't been explained correctly."

Sigmund Freud writes, "What is meant by consciousness we need not discuss – it is beyond all doubt."

T.S. Eliot has something to say too: "Consciousness, we shall find, is reducible to relations between objects, and objects we shall find to be reducible to relations between different states of consciousness; and neither point of view is more nearly ultimate than the other."

Why is consciousness needed today? Why should we work at creating organizational cultures that are more conscious? Two thoughts expressed by 20th Century visionaries. The late Vaclav Havel, first President of the Czech Republic and Nobel Laureate, writes: "Without a global revolution in the sphere of human consciousness, nothing will change for the better in the sphere of our being as humans, and the catastrophe toward which this world is headed – be it ecological, social, demographic or a general breakdown - will be unavoidable."

Time Magazine's Man of the Century, Albert Einstein, writes: "A human being is part of the whole, called by us 'Universe,' a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest – a

kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desire and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty."

Futurist Russell says this: "The biggest hurdle to defining consciousness is the word itself. A noun is inappropriate. Consciousness does not exist as a 'thing'. It is not a 'thing' to be known, but knowing itself."

B E C O M I N G A W A R E

Becoming aware involves one's state of mind. It invites self-exploration and self-examination. It means waking up to all that is going on around you, not just the matters that have your regular attention but everything in your environment. It means not only being aware of the immediate task but the larger purpose it serves, the effects it has on the organization and the world, i.e., the larger context. It means having some sense of the meaning for what you are doing and how it contributes to the whole.

Gaining higher levels of awareness is largely a personal undertaking but corporate professional development programs have added resources for this kind of work in recent years. Many corporate leaders have committed themselves to paths of perpetual development and lifetime learning as a means of sustaining self-examination in pursuit of self-actualization.

A high state of awareness includes the absence of denial of any kind. It means "having your lights on" at all times and remaining fully awake while you are at work. This awareness allows you to notice things that do not serve the overall functionality and effectiveness of the organization. These things can include collusions of various kinds where someone is allowed to get by with some behaviour that diminishes from the organization's purpose or goes against its best interests in any way. Condoning these behaviours is similar to how codependents enable their families in remaining dysfunctional. These tolerated behaviours could include cheating, dishonesty of any kind, gossip, whining and complaining about something but doing nothing to change it, tolerating incompetence and tardiness, discrimination or a myriad of other behaviours.

These collusions can also include attitudes that divide people, such as racism, sexism, rankism or any other isms that separate people and diffuse the output of human endeavour. They can also include attitudes within the corporate culture that place the internal needs and wants of management and employees

ahead of the customers' needs which fosters deeper bureaucracy and lower efficacy.

Avoidance or denial of anything "dark" or "bad" eliminates any chance of becoming aware – individually or organizationally. Tendencies for this collective avoidance are quite prevalent in many of today's corporations.

GETTING INTO ACTION

Once awareness about any dysfunction is present it's time to *do* something – to begin correcting. It's time to responsibly act.

What does "responsibly act" mean? It means engaging in a process of discovery and responding as if you've seen something for the very first time. Response is a root of "responsibility" or the ability to respond. Reacting prematurely, like rushing to action as soon as the "bad" behaviour is discovered, is often not really responsible. Responsibility includes thought, choice, comparison to one's values, and gaining consensus among the parties. Being "able to respond" with full awareness is not accomplished by merely reacting to an undesired condition.

Examples of less-responsible reactions might include the immediate firing of a salesperson when it is learned that he or she misinformed a potential customer, learning a "lie" had been told, or hiring a diversity consultant as soon as some prejudice is discovered, or issuing a righteously indignant memo to all staff that the "bad" behaviour "will not be tolerated."

These reactions may be coming from a place of protecting an image – either an individual's or the organization's. Take time to ask: Where does this unwanted behaviour have its roots? What about the organization's culture yielded this result? This approach examines the system for the root cause or source, not simply the symptom or the actor/player. A systemic approach to correction will likely yield lasting results rather than band aid quick fixes.

Use the situation to learn and grow, not only for the people involved, but for the organization.

NEW MEASURES OF PERFORMANCE

Consciousness does not only play a part in becoming aware of "problems;" it can also create new awareness about matters previously off the routine "radar screen." Making things better often involves looking at entirely new topics, things that can improve the organizational culture, reputation, product performance and customer service, not just "fix" the problems.

For instance, a Conscious Organization might periodically re-examine its purpose – why it exists, why it

offers its product or service, what its core values and priorities are. This can be difficult work since we all tend to become emotionally attached to things when they are close to our hearts or minds or wallets.

An organization which holds honesty (both factual and emotional honesty) and integrity high on its list of core ideals might want to look beyond the mere "misinformation" given by the salesperson in the earlier example and search for where and how this happened. It might question whether or not it was an isolated incident or a symptom of a larger more insidious "virus" in the core body of the company. Is a flawed system behind the dysfunctions?

Once the process of becoming more conscious has begun and intentional action has been implemented, the organization's values and core ideologies need to be re-examined in light of this new consciousness. These core ideals might change constantly as the organization continues to become more and more conscious. Since people and organizations can only strive for total consciousness, the process of becoming more and more conscious is integrated into the "way of life" for the organization; this is part of what a Conscious Organization is – a group of people who are constantly examining their own individual and collective consciousness.

CREATING A CONSCIOUS CORPORATE CULTURE

I know from personal experience that a commitment to becoming conscious on a personal level is a lifelong adventure. It means constant vigilance, impeccable discernment, and an ongoing willingness to continuously examine one's life, one's values, and one's relationship to oneself, others, and the world. It allows for falling short of these ideals from time to time; this is part of being human after all. Honest attempts to keep these shortfalls to a minimum, however, make for a sound underpinning for a conscious organizational culture.

Since an organization is a collection of individuals who have come together for some common purpose, a natural conclusion would be that an organizational commitment to being conscious requires the same continuous exploration and re-examination that is needed for personal consciousness. A core ideal of a company wishing to be a Conscious Organization needs to include this commitment to continuous self-examination throughout its life.

Since the Conscious Organization is the opposite of a dysfunctional one, its commitment to explore any "shadows" that come to light is totally contrary to the less-healthy company that often serves as a refuge for co-dependent


behaviours, underperformers and marginally competent people. As many mental health professionals will tell you, a primary co-dependent behaviour is keeping secrets and avoiding whistle-blowing on any matters that the “conspiracy” wants to hide.

One way to cure a dysfunctional system – be it a family or an organization – is an intervention by people who will no longer buy into the “conspiracy of silence” or who have felt enough pain and can’t stand it anymore. Such interventions are usually aimed at a person or a number of people within the group. They often resemble a sort of tough-love “ambush” since the targets for the intervention would probably avoid it if they were aware of what was planned.

In contrast, people in a Conscious Organization culture are open to learning about any unwanted patterns and breaking through any barriers they may have. Similar to when a person committed to a path of self-actualization invites friends to provide constructive feedback that will allow him or her to grow, the corporate culture of the Conscious Organization includes this permission, both explicitly and implicitly. Having a trusting and healthy relationship with co-workers and the organization’s mission is of paramount importance, far more important than an individual’s need to maintain their image, the illusion of control, or remain in denial about something that violates their core values.

In stark contrast to traditional ambush-like interventions which may happen in extremely dysfunctional organizations, people in Conscious Organizations welcome someone revealing any behaviour, policies or practices which do not serve the group’s greater consciousness and functionality.

The Conscious Organization is one where the lights are always ready to shine wherever darkness is found. It is a fit for people who are striving to be more conscious themselves and are seeking work environments that support and stimulate their individual growth as conscious beings. Everybody in the Conscious Organization knows the discovery process and the enlightenment that accompanies it is valuable and takes responsibility for calling attention to it.

The resulting organizational culture invites and welcomes competence, interdependence, openness, honesty, team play, ethical behaviour, self-examination, functionality, and peak performance. People attracted to work in such an organization will be those who are interested in or already committed to self-actualization. Imagine the power and effectiveness a workforce like this can offer the world! 



LOVE, CONSCIOUS EVOLUTION AND OUR EMERGENT COLLECTIVE INTELLIGENCE

VENITA L. RAMIREZ



Venita Ramirez holds degrees in Business Administration and Clinical Psychology. She is a principal of Pacific Integral (PI) and a partner in the creation of the Generating Transformative Change program, which provides a training ground for new forms of leadership, consciousness and global awareness, with the intention to relieve

suffering on the planet and to develop people in ways that will bring joy and wisdom into the world through service. Venita has coordinated, designed, led and administered human development programs since 1983. She coaches individuals at late stages of development, worldwide, and has a special interest in supporting and participating in leadership networks to support global health and wholeness.

*The ideals of art, of science are lighted
by reflections from the infinite.*

LOUIS PASTEUR

THE COMPLEXITIES OF OUR HUMAN LIVES AND existence seem to be growing exponentially. The European Union is rumoured to be on the brink of disintegration and economic insolvency, AIDS and malaria are rampant in Africa, drug cartels notoriously corrupt much of Central and South America, Japan is recovering from a huge earthquake, tsunami and nuclear meltdown, and a small group of powerful elite in the US and internationally, are co-opting natural resources worldwide for personal gain, without seeming care for the whole of life or our future. Our global mind is fragmented by infinite bits of information, scattered and moving in all directions, while our survival as a species faces growing threats from climate change and numerous variations of our own toxic waste. When we zoom in to the micro level we see that 2.8 billion people live on less than USD 2 per day, many starving and in slums¹. Children walk miles to get a small jug of dirty drinking water for their family each day, while babies die for lack of basic medication, and young children are forced to quit school to care for their families, or kidnapped and forced to work as soldiers or prostitutes. When we open our

eyes, we see injustice, pain and suffering that is so overwhelming and widespread, that we often shut down our awareness and go about our lives. Many of us feel powerless or lack the skills to do anything to abate our own predicament, let alone to contribute or influence change on a large scale.

At the same time, with an accelerating force, some are waking up to the possibility of global transformation and our responsibility individually and collectively to transform suffering into vital planetary wellbeing. Some of us have the combination of inner and outer resources to have our own needs met. Some of us have found our way into various degrees of influence with some particular constituency, knowledge and skill. We see the interwoven structures and patterns of human society that keep repeating themselves through our collective assumptions, habits and misperception. And we see that the only way to create a better world for humanity is for all of us to wake up together and contribute our various ideas, skills and perspectives with an agreement to work together for the common good of all beings, not just ourselves or our tribe, village or nation whether that be a religion, a culture or any particular segment of life. Through technology, we are coming together across cultures, discussing the issues and imagining a world in which *all* are fed, educated, healthy and loved. As we join with one another we encounter inspiration, reinforcement, strength and hope. We open to a deeper creativity and wisdom that seems to be accessible through a collectively sourced awareness, where we find synergistic solutions, synchronized relationships, and a deep, enlivening evolutionary flow. Collectively, our consciousness is waking up, and we feel ourselves intricately linked with everything on the planet. Dropping our exclusive identity with our own individual self, we see, feel and sense the same one, shining and expressing through all of existence and we see that we are looking at aspects of that same Self all over the planet. Since you are another expression of that same Self, I ache when you are suffering. From this locus of seeing and feeling the truth of our being, we are moved to love and to evolve ourselves in such a way that we begin to see how our own and the world's suffering can be resolved.

In the following pages, I will describe how our consciousness seems to evolve through stages that allow us to see these possibilities more clearly. I will describe how the movement of love expands naturally as a necessary outpouring of energy at later levels of development. We'll look at collective intelligence and collective presence as ways to synergize and mobilize our desire for wholeness on the planet. And I will offer a few pointers to ideas, individuals and organizations who already have begun moving in this direction.

THE EVOLUTION OF CONSCIOUSNESS

First what is consciousness? Philosopher, Ken Wilber has identified a dozen schools of consciousness theory and research from the fields of science, psychology, cultural anthropology, systems theory and others². He proposes that each of these perspectives on consciousness carries an element of truth, and that a variety of exterior and interior perspectives, combined with individual and collective perspectives, all of which co-exist and co-evolve in our experience of reality, are the minimum degree of sophistication that we need in order to secure anything resembling a genuinely integral theory of consciousness. Though brain science can follow the neuropathways in the brain and identify the mechanisms and processes from a concrete measurable perspective, it cannot identify, explain or measure the content of our consciousness. In our conscious awareness and subtle imaginations there are infinite variations of inner and outer worlds at play – visions, dreams and inspirations that reveal themselves in our subtle awareness, and sometimes through our intention, become manifest in concrete life. Along with our biological and relational urges and instincts, our level of consciousness drives us. Through the power of our consciousness, we influence our experience and outcomes of life. The more aware we are of our own consciousness, the greater influence we have over our interior and exterior experience. Furthermore, our consciousness is influenced by our culture, our history and the systems at play around the world. We are shaped and influenced by family patterns, religious beliefs, language, gender roles, race relations, media and political rhetoric. As a species we have fallen into unconscious patterns that have played themselves out for thousands of years. We separate ourselves by race and nation on the one hand while transnational corporations, the global economy, political networks and the world wide web have overridden

those barriers to create something that transcends them. Our outdated mental models, perceptions and relational patterns become assumptions that we don't even think to question. And while they may have been useful for someone long ago, or even earlier in this lifetime, many of these assumptions are now blinding us to possibilities for greater health and liberated transformation as a species. Various individuals seem to be aware of these collective constructs, but in order to create large scale global change, we will need to shift our consciousness as a whole species. How might we do this?

HOW MIGHT WE BEGIN TO TRANSFORM OUR CONSCIOUSNESS?

In order for us to transform our outdated, individual and collective systems and structures, we must acknowledge that our awareness is embedded in these structures and then step outside of them as much as possible so we can identify where we are, where we are going and what next steps we can take to facilitate our movement into greater wholeness and health as a species.

Over the last fifty years researchers have begun mapping out very specific ways in which human consciousness develops and evolves^{3,4,5,6,7}.

Susanne Cook-Greuter in particular, found distinct patterns and traits that occur as individual humans evolve into post-conventional stages of ego development. Building on Jane Loevinger's research, she identified two additional advanced stages of development for a total of nine stages, four of which identify characteristics of evolved consciousness beyond the conventional, mainstream mind⁸. Combining Cook-Greuter's findings with Wilber's AQAL Theory⁹, Terri O'Fallon currently is identifying additional refinements and details on the latest stages of human consciousness. The results of this research are providing a roadmap for humanity to follow in evolving our individual and collective consciousness¹⁰. The research also validates collective values and ethics that seem to be common to all humans, not just to a particular segment of society, values such as truthfulness, altruism, wholeness, compassion, and even consciousness itself. And the research shows that we can evolve all of these characteristics into the widest and deepest embrace possible. If we aim to influence the evolution of consciousness and transform society on any level or in any field, we will benefit by familiarizing our selves and our whole species with these stages of development. With awareness of how we develop,

*Consciousness
cannot be accounted for in physical
terms. For consciousness is absolutely
fundamental. It cannot be accounted for
in terms of anything else.*

ERWIN SCHRÖDINGER

we can identify processes for transforming human consciousness individually and collectively.

A GENERAL OVERVIEW OF HOW CONSCIOUSNESS DEVELOPS

Consciousness can be described as awareness, aware of the self-organizing and evolving nature of all of existence. Through our consciousness we are aware of our inner and outer worlds. As our consciousness expands our worlds expand. We might say our consciousness can be seen as that which beholds the emergence of concrete life, of subtle worlds, and of our own existence as consciousness^{11,12,13}. From the time we are born, through elementary school and even sometimes into high school and beyond, we tend to relate to the world in very concrete ways. Our awareness mostly revolves around our needs for food, touch, our possessions, our parents and friends, our home, nature and other aspects of the concrete world. Even our imagination is filled with concrete objects. An individual and whole cultures can develop into mature stages of concrete awareness that can be healthy in their context but remain limited in terms of affecting the world on a large scale or even recognizing the nuances that become available when awareness opens up into the next four stages of consciousness that comprise the subtle perspectives of human awareness¹⁴. Collectively, on average, we humans are reaching later stages of consciousness in our lifetimes than our ancestors. And with the advent of the internet, we seem poised for a significant acceleration.

As we move to later stages, from concrete based awareness to more subtle forms of awareness, we now have both concrete and subtle awareness available to us. Research shows that the majority of adult humans likely perceive the world and reality from three of these subtle stages of awareness, Expert, Achiever and Individualist¹⁵. When we begin to see the world from the first of these more subtle perspectives, we begin to realize we have an interior self and that we have the ability to have some influence on our outer results based on our own attitudes (interior intention). We begin to see that we can deliberately influence how others perceive and respond to us, because we have some control over our own self-expression in the world. At this stage we can learn from our past experience, imagine and calculate potential outcomes and consequences up to about six months in advance. Currently, in democratic societies, most of us reach this first subtle stage in our later adolescence. Because we are new to this ability to direct our own fate, we tend to value the opinion of

experts. Often we believe that there is one particular right way to operate or that there is not much room for deviation. A large percentage of the adult population (about 36.5%) reside at this stage and many remain at this stage (Expert) for their whole lives, affiliating with a particular belief system through which their perspective is reflected and kept in place.

At the next stage, our consciousness grows into a capacity for creating a plan five years into the future. We see more shades of gray and prioritize ideas. Many people leave traditional religions at this point as their awareness grows to include greater diversity. This group (Achiever) is motivated to achieve and can become quite successful in conventional society, however, they are still motivated primarily by their own needs and the needs associated with their specific view of who belongs in their circle of responsibility and care, whether family, community or nation. The majority of people in power around the world are at this level of consciousness. Thus many of our systems and structures, worldwide, result from strategies and visions implemented by individuals who can see only five years into the future and cannot see how the results of their actions will affect the whole of society, inter-systemically. They cannot yet understand the importance of context, nor can they see the relationships between complex systems, globally, generations into the future.

The next stage of development, still in the subtle tier, is the first group considered to be post-conventional. Of these subtle levels of ego-development or consciousness, a person can see a generation or two into the future and begin to take multiple perspectives on a situation. The individual realizes that an outcome is very dependent on interior and exterior contexts such as a person's self-concept, their temperament, their circumstances, their culture, their family history, the resources provided by their society or surroundings. The 1960's saw a significant upsurge in this segment of the population which is now estimated to be at 11% and growing. At this stage people value authenticity and begin to see from the perspectives of others in a new way. This new ability to shift their perspective and stand in the context or circumstances as someone else in a completely different situation, opens the heart and mind to a level of consciousness, in which one begins to advocate for those who lack the power to do so.

At the latest stage of these subtle perspectives (Strategist), a person's awareness of time and space opens up in such a way that they begin to see how these contexts around the world in the exterior and interior of consciousness can be prioritized. They begin to see

solutions on a larger scale for humanity. They see how various systems are interdependent and therefore must be influenced simultaneously. For example, they might identify three bodies of work from three different disciplines, or several thought leaders in various fields and then champion all three as an important combination of voices to lead us into a better future. The ability to see further into the future and to hold a number of contexts or lines of thinking simultaneously, often make them exceptional leaders and managers, especially when they can translate their expanded and innovative vision into steps that individuals at earlier stages can digest and follow. The individuals at this stage are estimated at around 5% of the population and growing rapidly, due to technology's support in the cross-pollination of ideas, information and contexts.

THE CAUSAL LEVELS OF CONSCIOUSNESS

Terri O'Fallon postulates that the next four levels of human development arise in what she calls the causal tier¹⁶. The research on these levels is emergent. In addition to the thousands of sentence completion tests underlying this research¹⁷, my colleagues Geoff Fitch, Terri O'Fallon and I have observed over 100 individuals in our transformative leadership program, *Generating Transformative Change*, for a minimum of nine months and some up to six years who have taken these assessments. As a result we have had the opportunity to view in-person, embodied expressions of these later levels of consciousness. Here is what we are finding.

There is a profound letting go of knowing the truth of anything concrete or subtle at these later stages. In the first causal level of consciousness (Construct Aware) we begin to see how language constructs our beliefs about reality and how language is a construct of our human mind. We see how, collectively, we have assembled all of our human-made concrete and subtle systems throughout time and space (historically/globally). And we see how our belief systems perpetuate our consensual reality. At this level of consciousness, we see that all of our ways of seeing and thinking, our systems and perspectives are constructs. This time can be alternately disconcerting, devoid of any substantial meaning and/or incredibly liberating. Because this level of awareness (and beyond) is so rare, there is little validation or reflection for the sanity of this perspective in conventional society. Often these individuals feel alone and unable to locate the previous version of their self. They begin to be aware of their awareness, and can watch themselves and everyone else playing constructed roles in constructed environments in which everyone unconsciously participates in certain

ways of dressing, thinking, seeing and behaving throughout whole systems, throughout human history and into the future. Through this awareness of constructs, they locate a self not based on any of these concrete and subtle systems, a self that is empty of constructs and yet stabilized in the empty/formless ground of being. Often they dismantle interior and exterior life and float for a while on these shores of freedom, sometimes with cynicism, angst and despair; sometime with a sense of all concrete and subtle reality evaporating even as it arises in the mind; and sometimes with a spacious realization that all that matters is love. Judgment begins to fall away since all meaning is seen as constructed and empty. Profound acceptance takes the place of judgment.

After several years of acclimating to this unfamiliar field of awareness, at some point the individual becomes motivated to prioritize these constructs, and this new ability to prioritize marks the beginning of a new stage of consciousness called Transpersonal awareness¹⁸. In this next stage, with the awareness that everything in their mind is a construct, the individual realizes that he or she can combine a number of systems, fields of knowledge or areas of seemingly unconnected disciplines into a new original whole creation. For example, a person might combine ideas from medicine, martial arts, integral theory, somatic psychology and education to design and implement structures that transform the health care system. Individuals at this level of development can begin to see humanity's future and connection with all of life and want to make a contribution that can affect as many people as possible with the least amount of effort. Often their systems and ways of thinking are more complex than most people can grasp. And their hearts have grown as a result of their growing sense of the relative relationships between all things¹⁹. Towards the end of this level of consciousness the individual begins to feel a sense of peaceful emptiness pervading all of reality. In spiritual practices such as meditation, this experience of emptiness is a profound temporary state, however when an individual reaches this level or stage of consciousness after having stabilized for a period of time through all of the previously described stages, it is no longer a temporary state, but a permanent, everyday, walking around experience²⁰. In the midst of all of the chaos of life, there is infinite stillness.

The last two stages of the causal tier of consciousness occur when an individual sees that even these more complex frames of reference are still limiting in terms of the ability to affect humanity for good. They open up to an even more subtle felt sense or

direct experience that they and everything else are truly made of the same stuff. This oneness is felt throughout the body-mind and stabilized as a permanent, ever-present direct experience. At this place the experience is that you and I (and everything) are literally made of the same energy and the same consciousness, or one ever-present source of all, and therefore, your suffering is my suffering; your joy is my joy. In these latest researched stages, individuals are no longer acting only on behalf of their own individual life, nor human life in general. The personal self recedes as background to the good of the all, meaning all of creation.

At the latest level of the causal tier (illuminated), the individual can see subtle emanations of light that exist prior to subtle images or concrete formations. They see a web of super subtle emanations out of which the concrete and subtle worlds arise, structures that reinforce one another and that if altered, could alter the entire trajectory of humanity's future. And they begin to prioritize these super subtle structures in ways that can help humanity transform 'all at once'. At the first level of this tier, a person began to see that all personal and social belief systems are constructs. At this latest stage of the tier, a person sees how the flows of energetic intention and relationships in the super subtle field create and recreate our present and future in the moment. From this perspective, a new clarity arises about how not only current systems but also collective intentions can and must be altered simultaneously at the concrete, subtle and causal levels of reality in order to affect change as broadly, deeply and rapidly as possible. This seeing and a desire to act are motivated by the ability to feel and sense into the suffering of all beings who are none other than the one same Self.

LOVE AS THE SUPREME UNIFYING PRINCIPLE OF LIFE

When the emptiness is permanent and all pervasive and the self recedes into the background, space/time dissolves and through this emptiness no individual thing is seen to have any permanence except the emptiness or stillness itself, and a felt sense and continuous subtle "seeing" of the revelation of form through awareness which includes all individuality, all collectivity, and all of the interior

For this view tells us that history is indeed going somewhere-it is going, not toward a final judgment, but toward ultimate Wholeness. And further, this Wholeness is not only the Nature of all natures, but also the consummate and ultimate potential of human consciousness itself.

KEN WILBER

Essentially what we see in human evolution is that as the self identity boundary expands then the love itself that we can feel for human beings expands with that boundary.

KEN WILBER

and exterior of existence as both individual parts and one seamless, infinite, timeless whole, permeating the emptiness. This profound realization and permanent continuous all pervasive ever-present synthesis of emptiness and form results as a felt experience of free-flowing, conscious, unpremeditated warmth, an all pervasive loving beholding, a movement of Love or infinite embrace with no object and with every object, through a generous and natural flow in service to all of life, to relieve suffering and cultivate health and happiness for every being and everything seen and unseen. The "individual self" is experienced as a part of the seamless whole arising in all at once relationship to all else and yet without separation. There is an interpenetration of opposites such that all paradox is resolved in this and every moment. From this level of consciousness we are everyone and everything not as our small individual human self, but as the all-pervasive benevolent, all-seeing Self. Again, this is a deep, intuitive seeing and feeling of the whole and an intuitive knowing of how all is created sustained and destroyed in relationship to everything else, between which ultimately there is no separation. It is from this place that we align with forces beyond us, in fact the force that creates, sustains and destroys all of life. Dr. Martin Luther King, Jr. said, "When I speak of love, I am speaking of the force which all the great religions have seen as the supreme unifying principle of life²¹." Orland Bishop says, "If [we] are to become equal to anything we have to stand above the social realm and be equal to the laws that makes human beings exist. Equal to the forces that make existence possible; not equal to social and political status²²."

OUR NEXT

EVOLUTIONARY MOVEMENT

Love is the single most powerful unifying force that we fundamentally share. From a baby's merging, dependence and nascent love for it's mother, to a love of concrete possessions and people as one's reflective identity, to a love for ideas, ones dreams and devotions, to a realization that all is one in a seamless unending whole, we love. Love is a movement, whether towards ones self or towards others. Along with survival, Love may be one of our deepest collective impulses. We could say that all of form is an act of Love, while all of stillness or emptiness is the awareness or consciousness out of

which Love springs. The notion of love is elegantly simple enough to speak to anyone and yet fundamental to all of existence itself. And one of the keys is to realize that the experience and understanding of love evolves. When we understand the evolution of love and consciousness, we can see more clearly how to give voice to a common vision that will unite us. Here is an example.

In the year 2000 the Earth Charter Commission published a framework of global ethical principles, the Earth Charter²³, which has been endorsed by over 4,500 organizations, including many governments and international organizations. The Earth Charter comprises sixteen principles in the following categories: 1) Respect and Care for the Community of Life; 2) Ecological Integrity; 3) Social and Economic Justice, and 4) Democracy, Non-Violence and Peace. One of the legitimizing features of the Earth Charter is that it involved the most inclusive and participatory processes ever associated with the creation of an international declaration. From 1997-2000 the draft document was translated into various languages, circulated widely and received input from scientists, international lawyers and religious leaders. The Earth Charter is an excellent example of a widely supported vision for humanity created through collective collaborative intelligence globally. Because it addresses concrete, subtle and even causal ethical concerns, it is relevant to human beings throughout the developmental spectrum. The principles address the *concrete* needs of all human life, such as access to potable water, food security, uncontaminated soil and shelter. Other principles address our more *subtle* needs such as the guarantee of human rights and fundamental freedoms including the opportunity to realize one's full potential. And still others begin to point toward causal awareness: "Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part." The Earth Charter transcends nation, language, religion, and culture. It is an excellent example of what can result when love and universal care for all beings is accessed and addressed via love's movement through our collective intelligence.

We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impacts on the environment. Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions.

THE EARTH CHARTER

We need a new global vision that is once legitimate inspiring and rigorous to seize the public imagination as well as broaden the political base for change.

PAUL RASKIN

WHAT IS COLLECTIVE INTELLIGENCE?

Over the last several decades and especially over the last few years, many individuals, organizations and communities are exploring the territory of collective intelligence, collective commons and global citizens movements²⁴. With the help of the internet, networks are emerging along with systems, processes and methodologies for optimizing collective resources and intelligence. Through these global, collaborative initiatives, new paradigms are rising rapidly that ultimately will replace those that no longer work for everyone.

Since Pierre Levy first coined the term, "collective intelligence" in 1994, researchers at MIT, UCLA, and The University of Brussels, to name a few, have begun identifying necessary elements and whole processes through which collective intelligence arises and contributes to greater synergy, productivity and aggregate solutions. In particular, Francis Heylighen at the University of Brussels, has drawn inspiration from a wide range of ideas in a trans-disciplinary approach to his research on the emergence and evolution of complex intelligent organization. He says, "This phenomenon, where a group of initially independent agents develop a collective approach to the tackling of some shared problem that is more powerful than the approach any of them might have developed individually, may be called collective intelligence²⁵."

When we open to this collective intelligence from a deeply sourced causal consciousness and the widest impulse to love, we realize that together, we have within us the power and ability to transform our reality faster than we thought possible. Few people foresaw the magnitude and widespread solidarity between individuals trans-nationally that became visible in 2011 inspired by The Arab Spring and which also became known worldwide as The Occupy Movement. This was a powerful, grass-roots movement created by people across generations, languages, nations, professions and across all educational, socio-economic and developmental levels. Individual leaders with particular strengths from various disciplines emerged to offer their knowledge and experience in one moment and became a participant in the next through a spontaneously, self-organizing collective force for justice. There seemed to

be a transpersonal collective consciousness moving its way through global civil society that had and continues to have a will of its own, a movement toward truth, universal care and justice on a large scale.

In 2007, Paul Hawken, estimated that there are at minimum 130,000 individuals and organizations involved in social and environmental justice initiatives worldwide²⁶. That number continues to grow. The collective intelligence that is available through these individuals and groups is formidable. Among these are a subset of individuals, groups and organizations who are deliberate and intentional in experimenting with sourcing and cultivating awakened collective presence, which is a causal expression of collective intelligence. One of these organizations is The Presencing Institute. Another is The Widening Circle. And another example is Pacific Integral's *Generating Transformative Change*, our global causal leadership program. Through our leadership intensives we invite extraordinary individuals to open to the source of causal awareness through which deep truth and creativity arises. Over nine months, we cultivate the field of collective awareness and collaborative presence through which love reveals itself in service to the relief of suffering and the growth of greater happiness and wholeness in the world. We teach the fundamentals of development, awareness, presence, embodiment, relationship, ethics, causal leadership, systems thinking, authentic communication, emergent facilitation and design, and global consciousness, all in service to a transformed future. Through the release of sole identification with our personal desires, we encounter a synergistic, collaborative arising of collective passions, resources, skills, knowledge and experience in service to the whole. The path of service becomes clear and together, through our shared movement, sourced out of love and consciousness, we see what is ours to do. Ironically, in service to the whole, each individual feels more alive, more full, valued and satisfied through release into something larger than their personal self. From the vast spacious, creative ground of being, collective resources emerge into a unified collaborative process in response to the current moment and particular situation. Creative initiatives and solutions spontaneously arise in answer to the call for wholeness, whether local or global. The capacity to hold, grow and transmit this awareness seems stable over the long term²⁷. Individuals who have experienced this process have gone into the world to further their work and grow their own networks of conscious collaborators. And our own global network of these causal leaders is growing. It is through these experiences with extraordinary human beings in our programs, that we are inspired

and convinced that collectively humanity has the capacity to love, grow and serve in ways that transform our future.

ONE OF THE MOST IMPORTANT THINGS WE CAN DO IS TO FIND EACH OTHER

As mentioned, there are organizations that are gaining momentum in their ability to attract and grow global networks of conscious leaders. Through these networks, we are finding each other and we are growing in magnitude and power. As we connect across nations and cultures, we will unite horizontally based on our level of consciousness and area of expertise, and vertically based on our region or sphere of influence. Through collaborative, collective intelligence, we can begin to allow our diverse gifts to combine in ways that result in innovative solutions that resolve our most pressing problems. One of the most simple and profound commitments we can make is to universal care or love. There is a fundamental truthfulness to kindness and generosity that takes a form of letting go of control and possession, and a trust that there is enough, that provision will come. Ironically, when we let go of me and mine, Love pours forth in all directions.

Through this evolved level of conscious awareness, we become open to the collective, creative intelligence flowing through everyone and everything. We begin to see and feel through the minds and hearts of others everywhere.

And suddenly our minds and worlds expand to include information we had never received previously. New information, knowledge, innovation and experience rush in from all directions. Our consciousness expands from the concrete to the subtle to the causal. We feel more, sense more, receive more, with more compassion, care and inclusive of all that exists. We open our senses and our awareness to the source of all and suddenly we have access to vast resources of creativity and unlimited potential through one another's unique contribution whether through individuals, cultures, nations or across sectors and disciplines. We discover that everything and everyone can serve the whole and in serving the whole, each becomes more valuable as a one of a kind unique individual part.

CONCLUSION

The evolution of life through love and consciousness seems to be at play through the past, present and future of existence. In the last 50 years, researchers

such as Piaget, Kohlberg, Gilligan, Kegan, Loevinger, Cook Greuter, O'Fallon and others, have mapped the evolution of our individual development as human beings from early childhood through to the most advanced stages of human consciousness as we know it. These results are showing consistency across cultures and they are revealing common patterns in the evolution of our human values, thought processes, methods of prioritization and meaning making.

When we see that love and consciousness evolve, then we can intervene to grow ourselves in ways that benefit individuals and collectives, worldwide. We can see the value of both interior and exterior perspectives and we can take the past, present and future of all species into account in our collective decision making processes. We feel compelled to respond on the largest scale that we can. We collectively open our minds, our hearts and release our selves to love. Through love, we are called into the movement to transform our global civilization for future generations. When we are moved by this unifying principle of love, we look around the planet, find where our gifts meet the world's needs and we are compelled to offer all that we are in service to that which pervades all. Realizing that we cannot do it alone, we find one another, pool our strengths, minds and resources, and open to the causal ground through which limitless creativity arises in response to our current situation. The force of love finds its way through our collaborative causal consciousness and as we open to this source of power and insight, we can finally begin to clear a path towards solving many of our most complex problems as a species, together. ☉

*Humans
can learn to draw from the
infinite potential of the Source by
choosing to follow a disciplined path toward
self realization and love, the most powerful
energy in the universe.*

JOSEPH JAWORKI

- ¹³ O'Fallon 2010, *The Collapse of the Wilber Coombs Matrix*.
¹⁴ O'Fallon 2011, *StAGES*.
¹⁵ Cook-Greuter, 2002, *Ego Development: Nine Levels of Increasing Embrace*.
¹⁶ O'Fallon 2011, *StAGES*.
¹⁷ Cook-Greuter 2002, *Ego Development: Nine Levels of Increasing Embrace*.
¹⁸ O'Fallon 2012, *Development and Consciousness*.
¹⁹ Wilber, Engler & Brown 1989, *Transformations of Consciousness*.
²⁰ O'Fallon 2011, *StAGES*.
²¹ Steenland, 2007, *Pursuing the Global Common Good*.
²² Bishop 2009, *Exploring Community*.
²³ Earth Charter Commission 2000, *The Earth Charter*.
²⁴ Roof 2012, Editorial, *Kosmos Journal*.
²⁵ Heylighen 2011, *Self-Organization in Communicating Groups*.
²⁶ Hawken 2007, *Blessed Unrest and Wiser Earth*.
²⁷ Fitch 2010, *Enacting Containers for Integral Transformative Development*.

REFERENCES

¹ Steenland 2007, *Pursuing the Global Common Good*.
² Wilber 1997, *An Integral Theory of Consciousness*.
³ Piaget 1969, *The Psychology of the Child*.
⁴ Loevinger 1970, *Measuring Ego Development*.
⁵ Kohlberg 1973, *The Claim to Moral Adequacy of a Highest Stage of Moral Judgment*.
⁶ Gilligan 1993, *In a Different Voice*.
⁷ Kegan 1994, *In Over Our Heads*.
⁸ Cook-Greuter 2002, *Ego Development: Nine Levels of Increasing Embrace*.
⁹ Wilber 1995, *Sex, Ecology and Spirituality*.
¹⁰ O'Fallon 2011, *StAGES*.
¹¹ Aurobindo 1996, *The Synthesis of Yoga*.
¹² Wilber 2006, *Integral Spirituality*.

AUROBINDO, S. (1996). *The Synthesis of Yoga*. (Twin Lakes: Sri Aurobindo Press).
 BISHOP, O. (2009). *360 Conference: Exploring Community*, Jama, Sweden.
 COOK-GREUTER, S. (2002). Ego Development: Nine Levels of Increasing Embrace. Retrieved from <http://www.cook-greuter.com/>.
 EARTH CHARTER COMMISSION (2000). *The Earth Charter*.
 FITCH, G., AND RAMIREZ, V. *Enacting Containers for Integral Transformative Development*. Proceedings of the Integral Theory Conference Aug. 2010, JFK U.
 GILLIGAN, C. (1993). *In a Different Voice: Psychological Theory and Women's Development* (Cambridge: Harvard University Press).
 HAWKEN, P. (2007). *Blessed Unrest and Wiser Earth*. From a speech at the Bioneers Conference. Retrieved from <http://www.youtube.com/watch?v=N1fiubmOqH4>.
 HEYLIGHEN, F. (2011). "Self-Organization in Communicating Groups: the emergence of coordination, shared references and collective intelligence", *Language and Complexity* (Barcelona: Barcelona UP).
 JAWORSKI, J. (2012). *Source: The Inner Path of Knowledge Creation* (San Francisco: Berrett-Koehler Publishers).
 KEGAN, R. (1994). *In Over Our Heads: The Mental Demands of Modern Life* (Cambridge: Harvard UP).
 KOHLBERG, L. (1973). "The Claim to Moral Adequacy of a Highest Stage of Moral Judgment", *Journal of Philosophy*, 70 (18): 630-646.
 LOEVINGER, J., AND R. WESSLER. (1970). *Measuring Ego Development 1: Construction and Use of a Sentence Completion Test* (San Francisco: Jossey Bass).
 O'FALLON, T. (2010). *The Collapse of the Wilber Combs Matrix: The Interpenetration of the Structure Stages*

- and State Stages. Proceedings of the Integral Theory Conference Aug. JFK U.
- (2011). *StAGES: Growing Up is Waking Up – Interpenetrating Quadrants, States and Structures*. Retrieved from www.pacificintegral.com.
- (2012) “Development and Consciousness: Growing Up is Waking Up”, *Spanda Journal*,3(1).
- PIAGET, J. (1969). *The Psychology of the Child*. (New York: Basic Books).
- RASKIN, P. (2006). *Global Transition Initiative* (Harvard University Lecture). Retrieved from <http://gtinitiative.org/resources/video.html>.
- ROOF, N. (2012) Editorial *Kosmos Journal*, Spring Summer.
- SENGE, P., AND SCHARMER, O., (2004). *Presence: Human Purpose and the Field of the Future* (Cambridge: SoL).
- STEENLAND, S., AND RUNDLET, P. (2007). *Pursuing the Global Common Good: Principle and Practice in U.S. Foreign Policy*. Retrieved from www.americanprogress.org/issues/2007/10/pdf/GlobalCommonGood.pdf.
- WILBER, K. (1981) *Up From Eden: A Transpersonal View of Human Evolution* (Boulder: Shambhala).
- (1995). *Sex, Ecology, and Spirituality: the Spirit of Evolution* (Boston: Shambhala).
- (1997). “An Integral Theory of Consciousness”, *Journal of Consciousness Studies*, 4 (1): 71-92.
- (2006). *Integral Spirituality: A Startling New Role for Religion in the Modern and Postmodern World* (Boston: Shambhala).
- WILBER, K., J. ENGLER, AND D. P. BROWN. (1986). *Transformations of Consciousness: Conventional and Contemplative Perspectives on Development*. (Boston: Shambhala).





EMERGING WORLDVIEWS:

TOOLS FOR TRANSFORMATION FOR NOETIC LEADERSHIP

MARILYN SCHILTZ



Marilyn Schlitz, PhD, is Global Ambassador and Senior Scientist at the Institute of Noetic Sciences, where she has worked for over 18 years. As a scientist and anthropologist, she has pioneered clinical, laboratory, and field-based research in the areas of consciousness, human transformation and healing.

A researcher, speaker, change consultant, and writer, Marilyn's books include: Living Deeply: The Art and Science of Transformation in Everyday Life (co-authored with Cassandra Vieten and Tina Amorok) and Consciousness and Healing: Integral Approaches to Mind-Body Medicine.

INTRODUCTION

FOR MANY PEOPLE, THE CHANGES THAT ARE OCCURRING in today's world are frightening and destabilizing. As a result, there is a rising call for new skills and capacities to help leaders in many walks of life to manage the challenges and complexities. Under the right circumstances, profound challenges can be a call to growth and transformation. Insights from both science and spirituality suggest that deep disruptions in our personal and social worlds can trigger positive shifts in people's worldviews and the organizations they support. Such shifts may lead to major changes in how people understand who they are, what has meaning and purpose in their lives, and how their actions inform the evolving world. Under the right set of conditions, these transformations can be cultivated with conscious intention and purpose. As noted by economists R. Eiserl and Corral: "For the first time in recorded history, awareness is emerging globally that we need fundamental systematic change to solve the world's complex environmental and social problems¹."

For several decades, research has been done at the Institute of Noetic Sciences to empirically investigate the process of worldview transformations. A multi-disciplinary team of scientists has systematically explored the dynamics of transformation, including the identification of catalysts for worldview shifts, the elements of transformational

practices shared across diverse spiritual and psychological traditions, and the outcomes and consequences of conscious worldview transformations for individuals and social institutions². The work has been applied in the context of science³, business⁴, education⁵ and healthcare⁶. The program of research included scenario building, narrative analyses of transformational experiences, detailed focus groups conducted with change specialists from various spiritual and professional disciplines, structured interviews with 60 teachers of worldview transformation, on-line surveys with 1000's of self-selected respondents, longitudinal research on various transformative practices, and the development and evaluation of a "worldview literacy" curriculum for children and adults⁷. Results of these studies suggest that transformative practices increase personal and social awareness, cultural competence, innovation, resilience, collaborative inquiry, collective problem solving, and prosocial behaviours such as compassion and empathy.

Findings from this research program led to a non-linear developmental model of worldview transformation⁸, which predicts that the root of change lies in each individual's direct, subjective, noetic experiences. As physician and transformative educator, Rachel Remen, noted in a research interview: "A transformation in [worldview] affects a kind of double vision in people. They see more than one reality at the same time, which gives a depth to both their experience and to their response to the experience⁹." With personal awareness of a broader worldview, people can expand their understanding of self, others, and their place in the broader universe. In the process, they report core changes in their personal identify, social relationships, and work experiences.

The purpose of this article is to apply the components of this worldview transformation model to noetic leadership as a transformative practice. The goal is to help catalyze positive transformations in today's global environment and in the meaning and purpose that people experience in their life and work. Eight tools have been identified from the research that can be applied to leadership at all levels of personal and organizational influence and activity. The key to noetic leadership is a shift from the focus on external sources of

information and authority to the development of each person's inner strengths, capacities and wisdom.

TRANSFORMATIVE TOOLS FOR NOETIC LEADERSHIP

1 ~ WORLDVIEW LITERACY. A fundamental tool for transformative leadership is an awareness of how worldviews shape human experiences and collective enterprises. Worldviews are the lenses of perception through which people know and relate to self and other. They inform people's assumptions, values, and beliefs¹⁰. While powerfully important, worldviews are largely buried deep below the threshold of conscious awareness, functioning on a kind of autopilot that informs every action and reaction of human experience.

Worldviews are shaped by many things, including upbringing, culture, education, biology, and environment¹¹. Worldviews also direct people's actions and behaviours, both individually and in society. They are expressed through different ways of knowing and being in the world, including subjective, first personal experiences such as feelings and self-reflections, inter-subjective or shared cultural meanings, and objective means of communicating through scientific, social, political and economic exchange. A transformative leader has the capacity to hold these various dimensions - experiencing and integrating multiple ways of knowing and being¹².

Worldviews are not static. Through the course of each individual's human development, different perspectives morph in small and large ways; the priorities people hold as teenagers are typically transformed as they grow and mature. In addition, people report profound personal experiences that completely shift their worldview, including their core sense of self and other - expanding their basic understanding of reality. As noted by psychologist Frances Vaughn during a research interview: "Transformation [...] is not simply a change in your point of view, but rather a whole different perspective of what's possible¹³." By bringing awareness and knowing to the exploration of worldviews, positive transformations can be learned and actively applied in everyday practice - both as individuals and organizations. Of course, this requires fundamental shifts in the way individuals and groups experience and relate to themselves and others. There are many doors that lead to an opening to worldview transformations.

2 ~ NOETIC EXPERIENCES. There are many catalysts for worldview transformation. At their core, they appear to involve a noetic experience, some direct personal encounter with a deeper truth than

they previously understood. William James, the late 19th century philosopher defined noetic as "states of insight, unplumbed by the discursive intellect, all inarticulate though they remain. And yet, they carry with them a curious sense of authority¹⁴."

These internal sources of authority are often described as a move from feelings of separation from the world to some deep interconnection with all of life. Such experiences may be triggered by positive, life-affirming openings, often thought of as epiphanies or breakthroughs. They may come from many small insights that lead ultimately to a shift in worldview. They may also be the result of a painful or disruptive experience; something that upsets the steady state of everyday experience. In the case of profound turmoil, the discomfort of staying the same may become harder than the choice to make fundamental shifts. Noetic transformation is not just a subtle adjustment. "Life as usual" is no longer a viable option.

3 ~ SELF-REFLECTION. People can become very entrenched in their view of the world. We often see what we expect to see and discard anything that refutes our core beliefs and values. An important aspect of worldview transformation is the ability for people to question their assumptions. Developing skills for self-reflection and self-inquiry can open important gateways into the noetic realm. Meditation, centring prayer, time in nature, working in the garden, art, each can offer opportunities to still the mind and quiet the body. Optical illusions, puzzles, and creativity exercises can also help one to experience things from another point of view and examine their core assumptions about what is true or false. As the world becomes increasingly diverse and multi-cultural, people have the opportunity to practice "cross-cultural juxtaposition," seeing the world through another cultural perspective¹⁵. Such noetic practices can be done alone or in groups.

Reflecting on the nature of worldviews and appreciating the differences across worldviews can lead to greater flexibility, cultural appreciation, and openness to change. Even under stressful situations, people make better choices and are more effective when they can learn to centre their emotional life, calibrate their inner guidance system, and trust the leader within them. Noetic leaders may learn to heed the call to action with courage to move forward into unfamiliar territory. Even bottoming out, approached with reflection and curiosity, can be an opportunity to find new inspiration and to embrace a broader range of possibilities. Following an intuition, trusting one's hunch, making a leap of faith, going with a gut feeling, are not new concepts to successful leaders. That inner compass can help guide people

and the organizations they lead down the path to personal and collective well-being.

4 ~ TRANSFORMATIVE PRACTICE. As noted by entrepreneur and author, Chip Conley: “Business principles are only as good as the practices that back them up¹⁶.” While transformative experiences can catalyze transformation, it helps if they can be developed through repeated practice in order to create new and sustainable habits. Consciously engaging in noetic leadership can become a transformative practice with the right conditions – leading to expanded insights, growth, and wisdom. Research in contemporary neuroscience shows that human brains lay down neural pathways based on repetitive experiences. Historically it was thought that brains are not capable of change as we move into adulthood. The old adage, “you can’t teach an old dog new tricks” has dominated scientific assumptions about adult learning for years. It is now believed that outdated behaviours which limit personal growth and development need not continue as people move forward in their lives. Under the right circumstances, most people are capable of learning and changing for the better. Recent discoveries in neuroplasticity, for example, reveal that adult brains can develop throughout life in response to new experiences and stimuli. Like children, the adult brain has the capacity to grow new neurons, repair damaged areas, and work in ways that lead to new patterns of thought and behaviour. More interesting yet, the brain can undergo physical changes simply through pure mental activity. Mentally rehearsing an athletic event, a musical composition, the creation of new computer software, or a new marketing campaign impacts the brain in much the same way that actually doing the activity can do¹⁷. It is the case that people are hard-wired to transform and their mental life can have measurable impacts on their external actions and deeds.

The lesson from these data is that people, under the right conditions, have the capacity to make fundamental shifts in what they know and how they know it. Encouraging both personal and professional development, individuals and organizations can build new habits, invite new standards of excellence, identify new thresholds for breakthrough, and create new pathways to the future.

5 ~ HOLDING POSITIVE IMAGES. Today we are well into an era of information, globalization and quantum interconnections. The dominator image of man over nature has begun to lose its focus¹⁸. Holding a positive image for humanity begins to balance masculine with feminine, cooperation with competition, and love with individualism. Rather than seeing global engagement as a zero-sum game, where one person wins at the expense of another

person’s loss, a new model of leadership is emerging that replaces short-term gains with an interconnected set of potential life affirming outcomes.

In an effort to understand the dynamics of transformation, Willis Harman and a team of futurists created a foundational report that set the stage for noetic leadership. In this report, they foreshadowed the paradigm shift that is underway today. In their words:

Images of humankind that are dominant in a culture are of fundamental importance because they underlie the ways in which the society shapes its institutions, educates its young, and goes about whatever it perceives its business to be. Changes in these images are of particular concern at the present time because our industrial society may be on the threshold of a transformation as profound as that which came to Europe when the Medieval Age gave way to the rise of science and the Industrial Revolution¹⁹.

Today we are poised between different worldviews and ways of engaging reality. Holding a pragmatic image of positive transformation, and directing individual and collective practices toward a positive future, can allow people to live into new possibilities. Noetic leadership can help identify and develop appropriate new guiding images that may quickly become an essential part of the emerging zeitgeist.

6 ~ INDIVIDUAL AND COLLECTION INTENTIONS. Intention is the determination to act in a certain way or to direct our will toward a particular goal or outcome. It is fundamental to any transformative practice. At an individual level, each person has the choice to engage in transformative practices and to invite their own growth and development. Through noetic experiences, people can find openings to transformation, but with intention they can build a practice that leads to new patterns of thought and behaviour. Intention is not only about individual goals but also about holding intentions for the greater good. Group intention setting can help each person to see their place in a larger story and to hold one another accountable for achieving their personal and collective goals. Intentions can be directed toward self, others, and the greater good of all. In the course of noetic leadership, they can be held as psychological, biological, social, cultural and ultimately, transpersonal intentions.

7 ~ TRAINING ATTENTION. Another key to transformative practices is the focus on where we place our attention. An important tool for training attention is shifting perspective so that the observer may look at the world with fresh eyes and new possibilities. What people see – and what they miss – often lies

below the threshold of conscious awareness. Cognitive psychologists talk about “inattentional blindness.” In controlled experiments, it has been demonstrated that where we place our attention impacts our capacity to see things that are not part of our focused awareness. Likewise, if the change is gradual, we may miss subtle and not so subtle aspects of a situation based on the cognitive tendency to identify patterns we already recognize and anticipate. As innovation specialist, Tina Seelig writes: “We become skilled at predicting what we will experience, and then we experience the things we predict²⁰.”

Attention training can increase an individual’s awareness of what they are not aware of in their everyday activities. It also helps people to notice unexpected opportunities. By maintaining a 360-degree perspective when anticipating trends and types of change in today’s world, one may become more flexible and adaptive. Paying attention to the perspectives of others can expand and deepen problem solving options and creative breakthroughs. A noetic leader also helps others to develop their leadership capacities. As part of the transformational practice, listening for the leadership of others is vital to shifting the paradigm.

In the midst of deep disruptions, *resilience* becomes a key transition-informing principle. Moving one’s attention to the natural cycles of growth and dissolution, a noetic leader can observe the social and physical ecologies that make resilience more likely to occur. Resilience research is grounded in what futurists call panarchy theory. At the core of this theory is an adaptive cycle, which shapes the responses of individuals, institutions and ecosystems to crises. Reaching a stage of vulnerability can lead to positive transformations²¹.

8 ~ EMBRACING SURRENDER. Finally, a powerful tool of transformative leadership comes in the letting go of rigid expectations. Based on the transformation research, it is clear that transformation involves recognizing those aspects of life that can change and those that cannot. Learning from mistakes, taking the hit as the gift, can build confidence in one’s leadership abilities. Risk and courage are important dynamics, but so is trust. As my colleagues and I have reported in our book, *Living Deeply*: “Transformative practices are more than just learning new habits or skills – and they don’t always work in the linear, goal-oriented fashion we’re accustomed to in our secular, physical lives. Transformative practices, in many ways, appear to work indirectly – by creating the best conditions for the natural processes of growth and awakening to take place.”

Can our civilization live into a new and more sustainable worldview? The answer will be based on whether a critical mass of leaders from every walk of life can find the vision, hear the call, develop sustainable practices, find support, and embrace the trust that is needed to take appropriate actions that may help craft a new image for our global community. The threat of disaster, without an image of better possible outcomes, can lead people to shut down and deny the problem or its positive resolution. The barriers to positive transformation are real and problematic. But history is a good indicator that humans are a resilient species, filled with creative insight and the potential for life-enhancing breakthroughs. In the face of the current global crises, an expanded sense of perspective, grounded in pragmatic hope, will lead to personal and collective empowerment. Creating fresh images that mark a new beginning, expressed in shared intention, expanded attention, and collective action, can help birth a new paradigm for humanity.

Noetic leadership comes when individuals find the hero within themselves. By harnessing one’s inner capacities through transformative practices, it is possible to cultivate the resilience that is needed to navigate the challenges of the outer world. Out of catastrophe can come the renewal of our global social and economic system, our environment, and of civilization. Moving away from reactivity, fear, and panic, and toward emotional balance and positive collective actions, allows noetic leaders to apply the time-tested tools of transformation for sustaining individual and organizational well-being. ☉

¹ Corral and Eisler 2012, *Leadership is Global*: 65.

² Schlitz et al. 2007, *Living Deeply*.

³ Schlitz and Harman 2004, *The Implications of Alternative and Complementary Medicine for Science and the Scientific Process*.

⁴ Harman 1998, *Global Mind Change*.

⁵ Schlitz et al. 2011, *The Worldview Literacy Project*.

⁶ Schlitz 2008, *The Integral Model*.

⁷ Schlitz et al. 2011, *The Worldview Literacy Project*.

⁸ Schlitz, Vieten and Amorok, http://www.noetic.org/research/transformation_model/.

⁹ Schlitz, et al. 2007, *Living Deeply*.

¹⁰ Schlitz et al. 2011, *The Worldview Literacy Project*.

¹¹ Schlitz et al. 2010, *Worldview Transformation and the Development of Social Consciousness*.

¹² Schlitz 2008, *The Integral Model*.

¹³ Schlitz et al. 2007, *Living Deeply*: 13.

¹⁴ James 1911, *The Varieties of Religious Experience*: 380-381.

¹⁵ Marcus and Fisher 1999, *Anthropology as a Cultural Critique*.

- ¹⁶ Conley 2007, *Peak*.
¹⁷ Begley 2007, *Train Your Mind, Change Your Brain*.
¹⁸ Corral and Eisler 2006, *Leaders Forging Change*.
¹⁹ Markley and Harman 1982, *Changing Images of Man*.
²⁰ Seelig 2012, *inGenius: A Crash Course on Creativity*: 71.
²¹ Markley and Harman 1982, *Changing Images of Man*.

R E F E R E N C E S

- BEGLEY, S. (2007). *Train Your Mind, Change Your Brain: How a New Science Reveals Our Extraordinary Potential to Transform Ourselves* (New York: Ballantine).
- CONLEY, C. (2007). *Peak: How Great Companies Get Their Mojo from Maslow* (San Francisco, CA: Jossey Bass).
- CORRAL, T. AND EISLER, R. (2006). "Leaders Forging Change: Partnership Power for the 21st Century", in W. Link, T. Corral, and M. Gerzon (eds), *Leadership is Global: Co-Creating a More Humane and Sustainable World*: 65-80 (www.globalleadershipnetwork.net: Global Leadership Network).
- DAVIDSON, R. AND LUTZ, A. (2008). "Buddha's Brain:Neuroplasticity and Meditation", *Signal Processing Magazine*, 25(1): 174-176.
- JAMES, W. (1911). *The Varieties of Religious Experience* (London: Longmans, Green and Company).
- HARMAN, W. (1998). *Global Mind Change: The Promise of the 21st Century* (San Francisco, CA: Berrett-Koehler).
- MARCUS, G. AND FISHER, M. (1999). *Anthropology as a Cultural Critique*. (Chicago: The University of Chicago Press).
- MARKLEY, O. AND HARMAN, W. (eds.). (1982). *Changing Images of Man* (Oxford: Pergamon Press).
- RESILIENCE PROJECT. <https://www.stanford.edu/dept/undergrad/cgi-bin/drupal/resilience>.
- SCHLITZ, M.M. (2008), "The Integral Model: Answering the Call for Whole Systems Health Care", *The Permanente Journal*, 12(2): 61-68.
- SCHLITZ, M.M. AND HARMAN, W. (2004). "The Implications of Alternative and Complementary Medicine for Science and the Scientific Process", in M. Schlitz, T. Amorok, and M. Micozzi (eds), *Consciousness & Healing: Integral Approaches to Mind Body Medicine* (London: Churchill Livingstone).
- SCHLITZ M., VIETEN C., AND AMOROK T. (2007). *Living Deeply: The Art and Science of Transformation* (Berkeley, CA: New Harbinger Publications).
- SCHLITZ, M.M., VIETEN, C. AND MILLER, E.M. (2010), "Worldview Transformation and the Development of Social Consciousness", *Journal of Consciousness Studies*, 17(7-8): 18-36.
- SCHLITZ, M.M., VIETEN, C., MILLER, E., HOMER, K., PETERSEN, K. AND ERICKSON-FREEMAN, K. (2011), "The Worldview Literacy Project: Exploring New Capacities for the 21st Century Student", *Johns Hopkins University School of Education New Horizons for Learning*, Winter 2011. Retrieved from <http://education.jhu.edu/newhorizons/Journals/Winter2011/Schlitz>.
- SEELIG, T. (2012). *inGenius: A Crash Course on Creativity* (New York: HarperOne).
- VIETEN C., AMOROK T., AND SCHLITZ M. (2006), "I to we: The role of consciousness transformation in compassion and altruism", *Zygon: Journal of Religion and Science*, 41(4): 917-933.
- VIETEN C., AMOROK T., SCHLITZ M. (2008). "Many paths, one mountain: An integral approach to the science of transformation", in D.H. Johnson (ed.), *The meaning of life in the 21st century: Tensions among science, religion, and experience*: 265 (New York: iUniverse).





SURVIVAL INSTRUCTIONS:

CONSCIOUSLY ADAPTING AND ENHANCING HUMAN CONSCIOUSNESS¹

ANGELA BROWNE-MILLER



Dr Angela Browne-Miller is an international author, speaker and teacher. She is founder of the Metaxis Institute for Personal, Social, Systems, and Species Evolution, based in northern California with locations and members around the globe. She is also founder of the Metaterra Inter-Dimensional Information Institute. Dr Browne-

Miller is author of over forty nonfiction and fiction books such as: Metaxis and Survival: Keys to Adapting Human Consciousness; Adventures in Crisis, Change, Transition and Death; Project Heartfire; Maka Shan; The Great Return; and Embracing Eternity She is editor of the international Violence and Abuse in Society Collection, and the International Collection on Addictions. Dr Browne-Miller earned her two doctorates at UC Berkeley and served as a US National Institute on Mental Health Postdoctoral Fellow. Website: www.drangela.com and www.metaterra.com; drangela@drangela.com.

READERS, THANK YOU FOR THIS OPPORTUNITY TO speak to you and your synapses. The following discussion is an inquiry regarding what is concurrently a casual and yet, if we are honest with ourselves, pressing matter: extinction. The human species has a say as to whether or not it will become extinct. This is an invitation to explore an option our species may have, and I say indeed has, now. I derive a great deal of my thinking from, and have developed a great deal of my work and research within, traditional fields of scholarship and inquiry² Here, in the material that follows, I build on, reach beyond, the present bounds of those modes of knowing to a natural next step.

How infinitesimal we are relative to galactic and cosmic proportions. Against this backdrop of immensity, of infinite dimensions of infinite macro and micro proportions, we as a species are perhaps inconsequential, as is our survival. Perhaps. However, it is my contention that we can have a greater say in the outcome of our evolution and existence than we generally allow ourselves (or are allowed) to believe. I will comment on the matter of my parenthetical note “or are allowed” as I develop the discussion in this article.

Even where we are stymied by grand phases and natural and unnatural shifts in our physical environment, even where the keenest of scientific and technologic advances are not advancing rapidly enough to protect or control our physical environment (our biological niche), even where our physical evolution is not rapid enough to prepare us for every (possibly) necessary adaptation, we do have the choice to effectively adapt. In fact, we stand at the threshold of what I choose to describe as a most magnificent EVOLUTIONARY OPPORTUNITY. We can consciously expand our species into dimensions beyond just the physical plane. There are physical and non-physical niches we can define and move into, come and go from at will. Such expansion is a matter of what I will describe herein as our, any, SPECIES' EVOLUTIONARY RIGHT. It is incumbent upon those of us being drawn to this form of thinking in our times, and throughout our times, to develop methods of signaling our species regarding what we know. We can bring a critical mass of our species to see this truly magnificent, even revolutionary, evolutionary opportunity I discuss herein – to see this expansion as an evolutionary necessity. Note that no profound shift in daily life is required. Rather this calls for a shift in awareness of what controls our minds and how our minds control us.

Note also that we humans are at times resistant to shifting the direction of our behaviours and perceptions, even when our survival may be at stake. This is not unlike the behaviour of those humans who have become drug addicted. There are indeed functions at work within our brains that render us vulnerable to minor and major, and positive and negative, addictions. This addiction function works on so many levels. We all are under its spell at all times, whether or not we see this.

Applying this understanding to the discussion herein, we may observe that we humans carry a natural tendency to grow *virtually even perhaps absolutely addicted* to our present or dominant perception of our reality and its seeming limitations. This tendency must be addressed. To this point, note that, among the fields in which I have done extensive work is the field of human behaviour, with one of the areas of my work being the social, psychological, and biological (including neuropsychological) nature of addiction to substances, behaviours,

states of mind, beliefs, and entire realities. I draw upon my research in this and other fields (including that of how the human brain learns) to expand the matters of this article. I also note that detecting and superseding the true nature and purpose of this addiction function our brains are programmed to have is central to my purpose herein³.

I am talking about detecting and breaking through the shackles of our programming, the programming working every moment within our brains and their synapses, our programming to accept as a given that we are only physical dimension beings, that we are restricted to the physical dimension except where a god or a drug has given us permission to access (or to feel we access) other dimensions. I am talking about what I describe as our *synaptic rights*⁴. These rights include:

- our rights to develop synapses that would allow us to see and know more about our realities;
- our rights to form the synapses we choose to form when we choose to form these;
- our rights to use our synapses the way we choose to use these;
- our rights to consciously control the movements of electronic and other transmissions across our synapses;
- our rights to further empower our synapses and our consciousness-es.

RE - THINKING SURVIVAL

We appear to sense that the survival of the human species is to a great extent in our hands, or better stated, in our minds. This is primarily evident in the emergence of environmental ecology sciences and movements. In the 1970s, one the most important mentors in my life, Gregory Bateson, set forth his riveting and even revolutionary collection of essays, *Steps to An Ecology of Mind*⁵. In this interdisciplinary collection of essays, Bateson demonstrates a discourse intended to stimulate thinking outside the normal pathways, what I found to be and still find to be some of the most liberating conceptual shift practices available to us. Ultimately, the meta-lesson I formed from this is that the environmental ecology movement was and is essential, and that this thinking can and must reach above and beyond the physical plane to the place where our consciousness-es live – best described for now as our minds.

Environmental ecology as a field contributes greatly to our respect for our physical environment and is a central movement along the lines of survival. Yet, there is clearly more to the survival of our species.

Expansions of the reaches, capabilities, dimensions, and dominions of the human mind and consciousness are indeed within our grasp. Even the notion of *expansion* begs further exploration now, a highly conscious, intelligently purposeful, exploration. On the frontiers of ourselves, we have the option to choose to be conscious and aware of our presences and our choices. All fields of human endeavour, including but not limited to spirituality, physics, linguistics, neurobiology, genetics, psychology, sociology, anthropology, the arts, and so on, must step forward to make conscious evolution, even conscious adaptation, of the human consciousness very high on the agenda. Species definition of itself as an inter-dimensional life form is essential now. To address this notion, let us begin by understanding our place in the physical plane, the only place we are apparently programmed to believe we can live in without divine (or psychedelic perhaps) intervention (or the illusion of this).

The notion that we can of our own free wills develop various niches to move into for the sake of survival is not clear to us in large part as a result of ancient teachings dictating to us that such travel has to be under control of something higher than ourselves. Ultimately this is true, however at least some of what is higher is our own higher consciousness-es. Yet, we have been programmed to barely tap the power of our own minds.

The physical plane is a great school. Or perhaps this world is better described as a bicycle with training wheels on it. Indeed, if paying attention, we see we always have the opportunity to become ever more aware. Every moment is a learning opportunity on some individual, societal and or species level: sensory, cognitive, psychological, social, even cellular and neural levels, and so on. In fact, we are designed to learn, as individuals and as populations, (and to learn to learn⁶) about our environments and situations in order to survive.

Among the many things we can and do learn is to move our “selves” through time and space, navigating the events, conditions, and transitions our species is experiencing and perhaps also those our species senses are coming, including minor and major, predictable, and also less predictable, passages and challenges. We are continuously reading the signals and signs of what is taking place, and of what is coming, and of how we can prepare. We are consciously and subconsciously (and also what I call meta-consciously) perceiving and or registering these signs as flows of information in the air, the atmosphere, the actual and virtual environment – and in our bodies, our minds, our consciousnesses.

Just as we individuals have sensory mechanisms, such as the most obvious, the five senses, our species and

even our ecosystems do as well. Just as the individual organism is designed to perceive (to perceive some things and not others), species, even and ecosystems, are designed to absorb information as well. We individuals (and species and ecosystems) who live in this physical plane are also designed to wall out too much data to avoid confusing, disorienting, dangerous overload. But is this the only purpose of our walling-out function? I contend that it is not, that we are programmed not to see (perceive) a significant amount of not only noise but also valuable information. Let me develop this programming issue later in this article. As for now, I refer readers to the view of William Blake in his poem, *The Marriage of Heaven and Hell*, that “If the doors of perception were cleansed every thing would appear to man as it is, infinite. For man has closed himself up, till he sees all things through narrow chinks of his cavern.” I believe Blake was joining many other thinkers (Aldous Huxley⁸ and we might also say even Plato and Descartes for example) who were and are pressing us to recognize that our limits (and our perceptions of these limits) are not absolute.

Instinct tells us a great deal. We know, where not consciously, then sub and un- consciously, where we are, and where we can be, in time and space, and also outside of it. However, we generally wall out “too much” knowing as part of our functional processing to recognize information perceived as necessary for immediate living and survival. We engage in this walling out, in numerous ways, every moment. Thus, while we are always what I describe as “meta-consciously hyper-aware,” we are programmed to barely realize this. We are kept, by our brains, from consciously knowing.

On a deep collective species level, our survival instinct functions are meta-consciously mapping, tracking, reading, changes around us, movements through cycles and transitions. Much of this species mapping and tracking is indeed done below the conscious level our brains are working on, and much of it never floats into consciousness. We tend to fully see or perceive only that which we are able or ready to consciously perceive. Some current theory even suggests that if particular neural pathways are not stimulated to develop in early childhood, then these may not develop as thoroughly or readily later in life. A simple example of this ready to learn, plastic, state of the brain of the young child is language acquisition. Children immersed in several languages at early ages tend to acquire these languages with greater ease than do adults even when the adults are learning via total immersion. Young children’s minds absorb like sponges. What is also true yet blocked from

our fully knowing is that adults do this as well. However, by the time we reach adulthood, the brain has assumed greater dominance over, control over, what it allows in and blocks out.

What do we do with any information overload a flooding of our conscious minds with massive data might cause? We need not fret, as we are programmed to ignore this data. We have mechanisms allowing us to block out, to in effect dispose of, data that threatens to confuse or disable our circuits. To wit, the human brain does a house-keeping-like neuronal shedding at several times during its development. This shedding purposely disables cells and connections within the brain that the brain does not believe (or perceive) it needs. We are programmed to do this shedding, automatically. We do not even feel ourselves doing so. This is all taken care of for us, via our own programming. Who else’s programming might this be? This must be our own...

ARCHAIC BIOLOGICAL HUMAN BRAIN

Let’s look more closely at this brain full of programmable synaptic chains that we carry in our heads, this thing that controls us. Our brains have stored within them the capacity to perceive information on other levels and in other dimensions of reality. However, we have stored the capacity to automatically block from the conscious level information we do not “need to know” on this conscious basis. Yet, we do have the capacity to train ourselves to choose to pull otherwise sub and un- conscious awareness-es into our consciousness. For example, one who stares at a field full of faces in a room full of strangers, or at a hill full of wildflowers on a hill full of wild vegetation, sees only the crowd or the field. But once the names of the strangers or of the plants are known, then one sees a room with specific people in it, and a hill full of specific wildflowers.

Among the functions of the human brain, likely the dominant function, is the executive control function which organizes use of, response to, and the hierarchical classifying, prioritization, and storing of, incoming information. For the most part, our executive control function is something we are not paying attention to, and are not aware of. While studying or even cramming for an exam may move a person in the direction of bringing vague awareness of the executive control function into consciousness, this awareness itself is elusive. We are not yet able to watch consciously our executive control mechanisms at work. These mechanisms are designed to be sub and un conscious level functions, to operate under our radar. This is a good thing, we assume. After all, control over this complex function should be done by higher powers, such as our higher consciousnesses...

Over the years, I have conducted a series of qualitative studies of children who were taught to be conscious of their thinking processes. Of the twenty children I taught about metacognition⁹ when they were ages three to eight, twenty years later, the majority of them use this term today, and are fully aware of what it means to “think about thinking,” to be aware of one’s brain processing. In fact, several have insisted that their schooling and even life success so far, in young adulthood, relate to their heightened awareness of their thought processes.

The implications of our taking truly full control of our own cognition(s) are many. First and foremost among all implications is that this would be a profound leap¹⁰ in our evolution, one we would have consciously brought about. Concurrently however would be the tremendous burden this could place on our antiquated biological brains, at least upon the biological neural pathways we are presently using to be at least somewhat conscious. Also concurrently, we would be freeing ourselves from the invisible control of our programming, and of our programming to be programmable. Were it actually possible to take full control of our cognitions and consciousness-es, our brains would no longer be residing inside us, with us serving as their hosts, while they were invisibly controlling all we know and see and do. Instead we would consciously have control over all we know and see and do.

Let’s return to the matter of survival. Indeed, we are on a long journey of evolution, OUR evolution. We can own this journey, take charge of, take increasing control of this journey, of our evolution itself. Moreover, we do see, more and more, that we are doing this evolving together, that we evolve as a species. This is therefore about all of us. We are a species; our species itself is a life form. We are both our individual and all of our collective consciousness-es. As the species that we are, we are part of one life form, this human life form. As a species, we can decide what it is we do need to know to survive. We can even decide what it is that we mean by survival.

Our understanding of our survival is based on the present need to know. We need to know on multiple levels, and our brains are equipped to do so. On some level we all know that the human mind – and its consciousness – can now, and must now, evolve itself far far more rapidly than does the human biology. This means that the human brain itself may need to ever more consciously perceive the situation, the reality, and to evolve itself far more rapidly than does human biology, including the human brain.

It is the human brain that calls our attention, or likely prefers not to call our attention to our situation at

this time. It is the human brain that reveals, upon close examination, our programming, programming that holds us to a near standstill relative to the speed at which we have a right to evolve. I do say “right” here, as I maintain that we have been designed with, implanted with, blocks to knowing this. This is not a discussion regarding whether what controls or directs us arises at the biological level or at the cosmic or even divine level. I leave that discussion to another setting.

These blocks to knowing function via implanted addictions to less than fully perceived realities. I will return to this matter after the following discussion of the human brain. Could the human brain be limited, blocked, antiquated? Is it archaic? Or are the seeds of our greater potential embedded in our brains? Are we simply carriers of the brain’s (or some higher level’s) executive control programming which limits us, which addicts us to beliefs we have in the realities we think we inhabit? Who are we today? Or who do we think we are today? Do we have a right to know? Who and what decides this?

Let’s dig in deeper here. The frontal area of the human brain contains the neurons that regulate emotions as well as “executive” functioning, or attention, abstract reasoning, organization, mental flexibility, planning, self-monitoring, and the capacity to use external clues to govern behaviour. The pre-frontal cortex in the human brain is 120 percent larger than that of other living organisms (presumably) giving the human animal “higher intellectual functions” than any other mammal (or other animal).

Yet our bodies and brains continue to function, in so many ways, according to hunting and gathering needs appropriate thousands of years and longer ago. Processes formerly necessary for our safety, well being and survival, may now serve to keep us enslaved, less than fully actuated, and unaware of what inhabits us via the brain’s executive control function, and frequently even dysfunctional, even ill. Take for example these basic and age old brain functions:

- a) pleasure centers in the brain which attract us to, and compel us to continue particular survival-like behaviours such as consuming food or compounds we intake as if they were food (alcohol, drugs);
- b) pleasure centers and hormonal activation mechanisms in the brain which attract us to, and compel us to mate with other humans in order to reproduce, or to act as if we are reproducing;
- c) activating, energizing centers in the brain that trigger readiness and even impulse responses to events such as danger, in which we prepare readily to fight or take flight.

These are ancient mechanisms that our brains are programmed to activate whenever triggered. We are fortunate that these mechanisms work even to this day. We eat, reproduce, stop at red lights without thinking, and so on. We are successful ancient organisms developing and surviving into these times. Yet, many of our brain functions are outdated and less than functional for us in our world today. But what if we can raise the bar on our brains, break through the limits embedded in our brains and programming? What if we can free ourselves of the boundaries of our old programmings? Can we truly break free? What would this look like?

We can. We can indeed start to grow new mental capabilities in a critical mass if not all of our species' members. We have the knowledge and the tools to enhance the awareness of our species. We can begin by understanding that we are literally designed to fall prey to programming that holds us captive in this form, in this dimension, in this lifespan. We can see that we are not only creatures of habit, but slaves to habits, guaranteed (as slaves to our own programming) not to see what is really taking place as per our species¹¹. We can begin by recognizing that we are implanted with the means of being, always being, addicted to our patterned states. Let me provide a few examples of the programming functions of our brains, and of the ways these functions invisibly dominate, control (and perhaps even shackle) us.

PARADOXICAL ADDICTION TO PATTERNED STATES

We are creatures designed to self pattern, auto-program, acquiesce to a hierarchical need to know structure which allows us to allow ourselves to only know so much, to not recognize how very vast we are, what infinite consciousness-es we have. We obediently form patterns, becoming positively, even negatively, addicted to our patterns of behaviour, perception and belief.

Indeed we are too frequently prone to develop dangerous addictions. Then we resist the change of pattern-breaking, even when the pattern we resist breaking is dangerous, life-threatening, counter-survival. *We obediently allow the pattern we need to break to move into its own survival mode, to dominate us – our brains and our drive for overall survival – for its own sake even when this pattern is a dangerous addiction.* There is a paradox in this resistance to the death of our problem patterns: stay addicted and the pattern addiction lives on, but stay addicted and you, your physical body, may die. The deep, genetically ordained drive within virtually every genetically coded living organism on Earth to become addicted to patterns themselves – to even desire being

patterned, dominates. Normalcy – no matter how troubled the normal pattern is – becomes the addicted state. A sense of normalcy (no matter how troubled that normalcy might be) is craved – and so is the *patterned state of mind* itself. We are designed to be this way.

Living with the drive to be patterned, to always be patterning, we cannot avoid the deeply experienced conflict embedded within us, yes within all of us. On the one hand, this genetically ordained coding function is a survival-oriented tendency, reinforced by pathways we have inherited via our genes. As the human mind falls behind the speed of change in our physical environment, its function runs awry. For example, the pleasure pathway, and the pleasure as pain relief pathway, are virtually one in the same. The flight or fight function is another good example of an essential program that can run haywire. Clearly, it is essential that we respond to life threatening situations automatically and rapidly, without taking the time to think, (such as when moving out of the way of a falling object or warding off a predator). However, many assaults and even murders are committed on impulse, in instances when this fight reflex or related functions run awry.

Moreover, it is quite convenient that certain necessary behaviours are matters of genetic coding and therefore basic reflex, and that other necessary behaviours can become habitual via repetitive reinforcement learning during life. Again, we must ask, how many people would stop their cars at red lights on time if they had to take the time to figure out from scratch every time what the red lights signify and how to stop the car? It is very good that we program ourselves to do some things automatically. On the other hand, however, we frequently fail to see that there is surely a down-side to this automatic programming capability of ours.

EXPLICIT AND IMPLICIT ADDICTIONS

Seeing how rampant and commanding these traps can be, we must take heed. We must also see how very obvious explicit problem addictions have become. And then we must admit to the less visible addictions driving them. We have to see the down-side of implicit – deep level – patterning. In recent times, humans have become increasingly conscious of the problem of addiction to destructive and dangerous patterns, such as compulsive overeating, drug using, drinking, and so on, and this is a good advance in our awareness of what I call *explicit additions* – the more obvious, more visible addictions.

This awareness can lead us to dig deeper and begin to see the more hidden patterns, what I call the

implicit addictions driving the explicit addictions, and ultimately our deepest programming, what I describe as source programming, and core programming. This is the programming driving us, and our species: to believe in, to accept, to perceive without questioning, physical limits and the physical dimension as the only locus of our individual and species existence. We are programmed to do this: programmed via random accident, or purposeful design, or some form of implant, or a higher order we are not entirely able to have access to? We have to ask.

We have learned how explicit addictions tend to follow rather basic patterns, and appear almost cyclic. This is where we see the common trigger-urge-response pattern. (Note that this standard addiction pattern does contain an escape route, a new response option, however we frequently are blocked from fully seeing this.) These explicit addiction – trigger-urge-addicted response – behaviours tend to be more readily recognized than do the other more hidden *implicit addictions*, such as the very obscure but very powerful core addictions we have to our ways of life and realities. Yet explicit addictions are, basically, only symptoms of implicit addictions to deeper behavioural, emotional, cognitive, perceptual, and energetic patterns. So the basic addiction cycle, the basic addictive pattern, is merely the surface cycle pattern, the *surface or explicit addiction*.

HIDDEN IMPLICIT PATTERNING

I have explained above that behind all surface, explicit, addictions are less visible, less obvious, *implicit* and even *core* pattern addictions. A warning: Implicit pattern addiction, even when life-threatening or quality of life degenerating, does not always signal its presence through explicit addictions. Implicit addictions are very difficult to detect let alone name. Still, implicit patterning can make its presence known in a variety of ways we may or may not connect with it. We may find that hitherto unrecognized yet poor work habits, poor eating habits, poor emotional habits, poor posture habits, poor sleep habits, poor routing of internal energy habits, eventually catch up to us – whether or not we have first or ever realized these exist. Our executive control functions have blocked our knowing. Now, if we choose to look very closely, we may also find ourselves increasingly aware of the executive control functions that live within our brains. Do these functions truly belong to us? Are we truly in control of them? Can we be? Could something this controlling have been planted deep within us? Did we do this to ourselves? Did we evolve this mechanism that can now control us without our realizing it is?

The catch up I refer to above can be a health alarm going off, or a family life deteriorating, or perhaps an explicit addiction emerging in the self or in the co-addicted persons or in the children as the result of underlying implicit patterning, or all of these at once and more. A sad and quite common example of the surfacing of implicit pattern addiction can be found in the instance of two long term silently raging and seriously depressed parents raising a child. The child may eventually become the identified patient in the family, the one with the explicit addiction. Perhaps this child develops a severe eating disorder, or maybe a self-cutting (self mutilation) pattern addiction, or perhaps this child becomes dually addicted to alcohol and methamphetamine. This child is the identified addict, as this child has formed an explicit addition while the parents' pattern addictions are less obvious, more implicit. And there are far far deeper patterns at work here. We are all highly programmable beings.

UNDERLYING SOURCE PATTERNING TO BE ADDICTED TO A REALITY

Even deeper than the hidden energetic and subtle emotional patterns of implicit addictions is the core addiction, *underlying source pattern programming*. This drives all other patterning including that of implicit and explicit addictions whether these are positive or negative addictions, positive or negative – good or bad – behaviour and perception patterns. The relationship of the underlying source patterning program to implicit and explicit addiction is ubiquitous yet largely hidden. It is here, at the deep level of the underlying source patterning program, that we again see the addict, and he or she is us.

We are all wired to form habits and addictions. The problem is, we are also all wired to form addictions to behaviours and perceptions our brains tell us to be addicted to. The SELF falls prey to the underlying coding or wiring to be addicted to patterns and to be addicted to being addicted to patterns. Therefore, when we want to break an addiction, we have to rewire the SELF. We have to reach the SELF and assist the SELF in overriding its explicit and implicit problem pattern addictions, and in overriding or at least setting straight its underlying addiction to the addicted state itself.

ADDICTION TO WHAT IS NOT REALLY OUR REALITY

We indeed have planted deep within us the coding to function obediently as creatures of habits – of habit patterns – to inherit habits via our genes and

via modeling from our parents and families and cultures, and also to develop habit patterns on our own while living our lives. As this coding function was purposefully developed or implanted within us, in our genes, to ensure that we function as life forms, we are built to utilize this coding function every moment of our lives. It is this function which makes it possible for us to perceive (and even to define for ourselves) a reality as a given, to tell ourselves we know where we are in time and space. It is this coding function that makes it possible for us to define our reality in every way in order to live “within” it – and in order to live. And yes, *part of living within a given reality successfully is buying into that reality entirely, or almost entirely.*

Although quite subtle, the tendency is to form an addiction to reality itself, (or to what is perceived as reality itself), to survive. In fact, organisms such as ourselves develop beneficial adaptations to the environment – to reality – that increase the likelihood of our survival. We also change the environment where we can, sometimes increasing the likelihood of our survival, sometimes increasing the likelihood of our present-time survival but unfortunately failing to do the same for the long run. What a gamble changing our environment in the now with no regard for long term consequences is!

We have been doing this adaptation to the environment throughout our evolution. And we have been passing on the adaptations to our environments we have developed via our genes (as well as via our cultures and traditions). So while the brain’s reward system reinforces important behaviours today, in the now – eating, drinking, sleeping, mating – this survival oriented functioning itself has been passed on to us through time and we pass this on to future generations. However – and this is a big however here – all this is predicated on the *successful* passing on of an adherence to a reality in which these functions work and continue to be survival-oriented. While this is a rather lofty concept, it can be brought right down to Earth with the simple example of hunting prey for dinner. In the modern so-called “developed” world, we rarely have to directly hunt and kill prey for dinner. In fact, were we to engage in this activity in our neighbourhoods and cities today, we might find ourselves mistakenly applying this drive to household pets and zoo animals. Health concerns, anger and havoc could emerge. Fortunately, we have adapted this drive to hunt and kill our prey for dinner to our modern environment and now control and even suppress this drive.

By contrast, we have other drives that we need to continue today, such as the drives to sleep and to mate. Fortunately we still mate, although population and corresponding scientific pressures may be

changing mating and related sexual behaviours. Let’s take the behaviour of sleep as a yet more general example. We need to sleep. Fortunately we are coded to need sleep, to feel the need for sleep, and to sleep when tired. Where there may be a point in the development of the species where sleep or as much sleep is not required, this new adaptation will require internal genetic coding (or external medical interventions) to ensure that whatever metabolic and behavioural changes are needed are made.

ATTENTIONAL BIAS PROGRAMMING

We have to take a moment to think of cows out to pasture. When the dinner bell rings, the cows proceed, as if having been ordered, like four legged automatons, in line over hills, even along dangerously narrow and steep pathways, to dinner. (The cows are programmed to respond to the dinner bell, the food has reinforced this program or pattern. More than this, the cows are pattern addicted to the trigger, the dinner bell itself.) How readily programmed living organisms can be, even have to be. We all have wired into ourselves our own dinner bells.

Numerous behavioural studies point to an abnormality in the allocating of attention to what are called drug cues (reminders or triggers of various forms) in drug addicted persons. Basically, more attention is paid to details related to the addiction than to other details. Attention is more rapidly, more firmly, and with more holding power, captured by items associated with an addicted person’s substance or activity of choice. Studies show that, when a drug addicted person is presented with two visual stimuli or “cues” (also called “targets”), one on each side of a screen, one a drug related stimulus, the other a nondrug (or neutral) stimulus, the person who is addicted to the drug will stay focused on the addiction related images. Addicted persons will respond more quickly to the first type of target or cue, the one related to the drug addiction.

And then in later showings of pictures, this time with neutral pictures on both sides of the screen, these same persons will then respond to whatever is now in the location of the side which had once pictured the drug addiction-related item. Findings are telling us that in drug addicted persons, attention is captured and then held by drug-related stimuli over other nondrug related stimuli, and even by memory of location of drug related stimuli over nondrug related stimuli. Attention is automatically drawn back to – attention automatically seeks and favors – the source or location of the drug related stimulus. The brain – or its problem

pattern addiction that is – has programmed the brain to seek and place priority on triggers for its addiction, frequently to the exclusion of other cues or information. Now, call our perception of reality the drug and see how programmed we are to only pay attention to that which supports our addiction to this drug. Information that would tell us we are far more expansive life forms is blocked out by our brains' executive control mechanisms.

Another type of experiment looking at attention in general finds drug addiction-related bias again, this time in a modified version of what is known as a Stroop Task. The original Stroop Task presents words (including color names) displayed in different ink (or screen) colors. Subjects are tested for their speed in naming the color of the letterings. When a word is printed in green ink, the correct response will be green. Now, when a word is the word for a specific color, such as red, but is printed in the color of another color ink, such as green, subjects tend to be slower in naming the ink color. Clearly, for color words that do not match the ink they are at naming, the brain requires more time to know the color of the ink the word is written in; while, for neutral, non-color words, the color of the ink is correctly named more quickly. And again for color words written in a congruent font color, the color of the ink is correctly and rapidly named most of the time.

This is what is known as the Stroop Effect, which occurs where attention devoted to reading the word (or signal) interferes with attention devoted to naming the word's (or signal's) ink color. When this task is modified to test for the possibility of drug addiction-related attentional bias, similar results are acquired. Here, drug-related words are presented to drug addicted persons in varying ink colors, and neutral words are also presented in varying ink colors, with the results indicating that drug-related words demand more attentional resources than do neutral words. In other words, the ink color of more neutral words is named more rapidly than the ink color of drug related words because the drug-addicted brain places *more attention* on drug-related words themselves rather than on their colour¹². Our brains control what we pay attention to, even what we know to exist. Our brains define the limits of our realities.

In drug-addicted persons, we see that words and images associated with drug use have a heightened capacity to capture and hold attention, and that such stimuli interfere with attention to other things in their environment. This heightened attention toward drug-related stimuli occurs in a wide variety of addictions including addictions to: cannabis, cocaine, opiates, tobacco,

alcohol, caffeine, food, gambling, sex, relationships, love, violence, and even shopping-spending. We find that our brains grow addicted not only to what addicts us, but to all pathways supporting that addiction. Neural pathways that would offer alternative realities begin to be shed, to die out.

Now, imagine that this is the case for the largest most invisible of all our reality addictions. Imagine this and see, detect, this to be the case. We are slaves to our programming to be attentionally biased. We are held captive to our physical plane limitations by programming locking us in. Who has the key? If we do not have the key, can we develop, or evolve this key? Yes.

DEGRADED DECISION MAKING FUNCTIONING

At the heart of most of our behaviours is the moment of deciding: the go/no-go, do/do-not-do, yes/no, proceed/stop. This most primary, and at the same time ultimate, moment in our behaviours is *THE MOMENT* – the decision-making moment. This *MOMENT* is actually a chain of moments, as any one decision is actually a chain of decisions, many of which are so subtle we are not conscious of them. Most behaviour, when broken into small steps, increments, actually involve long chains of conscious, subconscious and unconscious decision-making processes.

One analysis of the process of selecting responses is called the go/no-go model. In go/no-go testing, different types of cues that indicate to the subject whether to respond or to refrain from responding to the cue are presented. Drug addicted individuals have difficulty avoiding responses to pictures or stimuli related to their addictions. In laboratory go/no-go studies, addicted persons demonstrate greater inability to refrain from responding – greater inhibitory impairment – when presented with drug-related cues. And we are all programmed with such inhibitory impairments.

A decision-making task commonly used to study addicted person's thinking is the so-called delay discounting task. This type of task requires subjects to decide between a reward (such as a sum of money) being available sooner and a larger reward (such as a larger sum of money) being available at a later time. Addicted persons tend to choose the smaller, more immediate addiction-related rewards more often, despite their relatively small size and thereby diminished reward amount. The delay which is part of the delayed but larger reward diminishes the perceived value of the delayed but larger reward in the now. This is called delay discounting and it has been reported for a variety of addictive disorders, including addiction to nicotine, alcohol,

amphetamines, cocaine, opiates, gambling, shopping, sex. While this tendency for problem pattern addicts to more steeply or more frequently discount delayed monetary rewards is quite consistent, it also appears that delayed rewards consisting of the drug of choice are discounted even more severely by drug addicts. For example, heroin-addicted persons who are participating in risky needle-sharing behaviours show greater delay discounting of both heroin and monetary rewards. The drug of choice with a cleaner needle *later* does not register as valuable as the drug of choice *now* with no insurance of clean needle. And, it is also seen that money later is not as valuable as money, albeit less money, now to buy the drug now.

Whether or not addicted to heroin, or any substance, it is becoming increasingly clear that we all carry within us *mechanisms for overvaluing immediate rewards* (what may seem to be rewards) over delayed rewards. This very mechanism primes us to continue problem addicted behaviour in the now in the face of its negative consequences later. Hence when we say that addiction is the continued use or behaviour in the face of adverse consequences, we are frequently saying that addiction NOW is the continued use or behaviour NOW in the face of CONCEIVABLE adverse consequences LATER, whether that LATER be a moment, an hour, a day, a week, a month, a year, or several years later. The reality of later recedes as the problem pattern dominates one's reality. We are all programmed this way.

ACTION SELECTING AND INHIBITING

The brain plays a major role, in fact virtually the only role, in both selecting and inhibiting our actions. The brain makes our decisions about our actions for us. Our biocomputer brain is always working, always serving either us – or our positive and negative addictions to realities. In that our brain is responsible for the programming that addicts us, (for example that addicts us to drugs and to nondrug activities), we have to wonder *at what point the brain becomes invested in our selecting addiction-fueling behaviour over addiction-breaking behaviour.* (In my years of working with problem addicted persons, I have come to recognize the matter of investment in addiction as central, as this is investment in a, our, reality. We invest our attention and we direct our behaviour to support our addiction to what we believe is real).

A great deal of evidence regarding the role of the brain's frontal areas in action selection and in complex decision making comes to us from neuroimaging data. Among the findings is the understanding

that the brain's right hemisphere's frontal lobe is involved in our efforts to prevent or deter what of our behaviours we may want (or may think we want) to prevent or deter. Another area of the brain, the fronto-median cortex, plays a role in voluntary response inhibition. Other studies point to the importance of dopamine in regulating discounting behaviour. How amazing it is that the brain employs biological, biochemical mechanisms to make the right (and wrong) decisions about addiction in the face of present and future consequences. We have to wonder, how much is the failure of our *response inhibition function* actually voluntary and conscious, and how much of this is subconscious and out of our conscious control? What can we do to convince our mental main frames, our brains, to bring these decisions back into conscious control? Who is in charge here, our troubled patterns or our SELVES?

Who should be in charge here, the pattern addiction or the SELF? The answer may be obvious – the SELF – unless you speak for the problem pattern, the problem reality, which has taken control of the SELF.

RAISING THE BAR ON OUR OWN EVOLUTION: FREEING OURSELVES

Are we actually prisoners of programming from which there is no exit? No. Our very own neuroplasticity offers a path. Neuroplasticity (aka: brain plasticity, cortical plasticity or cortical re-mapping) refers to changes that occur in the organization of the brain as a result of experience. According to the theory of neuroplasticity, thinking, learning, and acting actually change both the brain's physical structure (anatomy) and functional organization (physiology) thoroughly. In fact, neuroscientists are presently engaged in a re-thinking of what are described as critical period studies which for a long time have been seen as demonstrating the immutability – unchangeable nature – of the brain after development concludes at the end of childhood. New findings on neuroplasticity are revealing the mutability – changeability – of both structural and functional aspects. This is substantial paradigm shift, and one of the most important discoveries of the past 100 plus years. This means we can have a say in the evolution of our brains.

Enhanced brain development is a path. Autopsies of persons who have developed great talent in specific areas frequently show a great deal of development (more capillaries and more neural connections) in the areas of the brain related to that area of talent. Put together what we are witnessing regarding neuroplasticity and enhanced brain development, and

doors open. *The brain-mind has room to grow... and a way to grow. The brain is still evolving! And we can have a say in the sort of evolution the brain undergoes. We can take conscious control of the evolution of our brain's frontal lobes, most significantly of our executive control functions. Now we can evolve our executive control mechanisms rather than have these evolve – or not evolve – us further.*

BREAKING OUT OF THE DOMINANCE OF THE OLD BRAIN

Breaking the dominance of the old brain involves establishing new neural pathways, new capacities for perception and expansion. This can be the essential liberation of the intelligence/consciousness of humanity from its biological limitations. First we have to see the problem of hemispheric (or brain section) dominance over perception. How do we break free? Simple tools can release us.

We can do a lot to raise the capability of our brains... to evolve what the brains can access of the consciousness CONSCIOUSLY. This is not about magic or unscientific conclusions, this is about taking what we know scientifically and pulling it all together to really see the doors that are opening for our species. We are seeing and even proving that the human brain can do a great deal more than it presently does, which is already quite a bit. For example, we can think about, move our concentrations and our perceptions, in essence ourselves, to various planes of reality. WE ARE ALREADY LEARNING TO MOVE IN AND OUT OF THE CONFINES OF THIS DIMENSION... As individuals, we can elevate the individual organism matrix. We can consciously see the perceptions and webs, realities, we weave and rework them. And, as a species, we can elevate the population or species matrix. And, even as an ecosystem, we can elevate the ecosystem matrix.

GAINING EXTRA DIMENSIONAL MENTAL CAPACITIES AND CAPABILITIES

Deep within our synapses, we can enhance our capabilities to move to and from this reality, this dimension, this perception. Extra dimensional capabilities can be learned, acquired and via critical mass effect shared with the tribe of humanity. These capabilities include: a) understanding some will object; b) knowing the brain is ours to evolve; c) a new level of learning; d) metaphoric transfer; e) enhanced navigation capabilities: navigation out, navigation when out, navigation back in, among other things¹³.

We must understand that some will object to this perspective, however this is about seeing ourselves and our minds as INTERDIMENSIONALLY MOBILE. This is also about understanding that this inter dimensional mobility is quite natural and is our birthright.

EMBRACING ETERNITY: OUR BIRTHRIGHT

We tend to think that much of what we do not see is inaccessible to us, and that there are mysteries we are not armed to solve. We have somehow become accommodated to a notion that ease of transition and movement in and out of the physical plane, by physical death or other means, is not readily available to us at all times. Somewhere deep in the messages we have historically been provided is the concept that the KEYS to the matrix-shifting we need to be able to do consciously (to transit minor and major changes and deaths effectively) are “mysteries.” Yet, the KEYS are everywhere around us and within us. And, being able to spot these KEYS is our birthright. The only mystery may be suppression of this information and the historical treating of this information as something very special to which only a few are entitled.

THE LIFE FORCE DOES NOT DIE.
THE HIGHER PERSONA NEED NOT DIE.
THE CONSCIOUSNESS CAN LIVE ON.
THE HUMAN CONSCIOUSNESS CAN HAVE A SAY
IN ITS EVOLUTION.
THE LIFE FORCE DOES NOT DIE.
YOU DO NOT DIE.
THE SPECIES DOES NOT DIE.
INTERDIMENSIONAL MOBILITY,
HENCE SURVIVAL,
IS OUR BIRTHRIGHT.

Whether we choose to merge with the collective or to individuate remains for us to decide. What I mean here is that I contend that this can be *our* decision, that once we gain conscious control of our evolution into other dimensions and realms, we can navigate these realms, even define these realms for ourselves. It is time to break free of the programming holding us captive. To set ourselves free. This is the adaptation that will empower us to survive: to move back and forth from various dimensions, bringing our consciousness-es who will be liberated from the dominance of our archaic brains. We can then evolve the brains we need for the next steps. We can move beyond the limitations of physical evolution and development of ourselves and our minds. We can then exercise our species' rights to inter-dimensional mobility. Our niches await us. ☉

¹ Text excerpted reprinted with permission from the book: *Metaxis and Survival: Keys to Adapting Human Consciousness* to be released by August 2012. (www.netaterra.com).

² See: 1) Browne-Miller, A. 2012. *Metaxis and Survival: Keys to Adapting Human Consciousness*; 2) Browne-Miller, A. 2009. *International Collection on Addictions*; 3) Browne-Miller, A. 2009. *Rewiring Your Self to Break Addictions and Habits: Overcoming Problem Patterns*; 4) DeAngelis, A. 2008. *Transition and Survival Technologies*; 5) DeAngelis, A. 2008. *Embracing Eternity: THE LIFE FORCE DOES NOT DIE*; 6) See also books listed at AngelaBrowne-Miller.com and <http://www.metaterra.com/consciousnessbooks/personalandplanetary.html> and <http://www.metaterra.com/novelsbytitle.html>

³ Further discussed in Browne-Miller, A. 2012, op. cit., and Browne-Miller, A. 2009. *Rewiring Your Self to Break Addictions and Habits*. See also Browne-Miller, A. (ed.). 2010. *International Collection on Addiction: Volume Two: Psychobiological Profiles*. <http://www.angelabrowne-miller.com/booklist/collectiononaddictions.html>.

⁴ See discussion re synaptic activity in last chapters of Browne-Miller, A. 1995. *Working Dazed*.

⁵ Bateson, G. (1972). *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology*.

⁶ One of my greatest mentors, Gregory Bateson, was the original proponent of “learning to learn” as noted in his seminal book, *Steps to An Ecology of Mind*.

⁷ Blake, William. 1870. *The Marriage of Heave and Hell*. Several original versions are said to exist and can be found in collections. Presumed to have been composed beginning in or around 1789, when the author was 32. This poem was Blake’s first full-scale attempt to present his own philosophy.

⁸ Note that it was 1949 when Huxley wrote to George Orwell, author of 1984, congratulating him on “how fine and how profoundly important the book is”. In his letter to Orwell, he predicted: “Within the next generation I believe that the world’s leaders will discover that infant conditioning and narco-hypnosis are more efficient, as instruments of government, than clubs and prisons, and that the lust for power can be just as completely satisfied by suggesting people into loving their servitude as by flogging them and kicking them into obedience.” See Huxley (1969). *Letters of Aldous Huxley*.

⁹ Browne-Miller, A. *Raising thinking children and teens*.

¹⁰ DeAngelis, A. *Transition and Survival Technologies*.

¹¹ Op. cit. Browne-Miller, A.

¹² Other tests of attentional bias reveal much the same, that greater attention to, attentional bias toward, drug related stimuli is common among persons addicted to the drug that a particular stimulus addresses or suggests in some way. Other sets of tests for attentional bias include change blindness tasks, in which participants detect slight changes between two rapidly alternating pictures or visual scenes. Drug addicted persons more readily detect drug-addiction-related changes in a pictured scene than do those who are not drug addicted. And yet another test for attentional bias is the attentional blink test, which is used to study responses to stimuli and also addiction-related attentional abnormalities. A stream of visual stimuli is rapidly presented, with instructions to detect two specified stimuli within the stream. The first and second targets or cues are separated by a certain amount of time, such as a separation of between 200-400 milliseconds. Subjects are generally more likely to miss the second target because attentional resources are already allocated to processing the first. And this is the “attentional blink.” When the first stimulus is an addiction-related stimulus, addicted persons

demonstrate a longer and more extended attentional blink. However, when the second stimulus is an addiction-related stimulus, an addict’s first attentional blink is reduced.

¹³ Browne-Miller, A. 2012. *Metaxis and Survival*. DeAngelis, A. 2008. *Transition and Survival Technologies*.

REFERENCES

- BATESON, G. (1972). *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology*. (Chicago: University of Chicago Press).
- BROWNE-MILLER, A. (1996). (new ed. to be released fall 2012). *Working Dazed: Why Drugs Pervade the Workplace and What Can Be Done About This*. (New York: Insight Books).
- (2009). *International Collection on Addictions*. (London - Praeger: Greenwood).
- (2009). *Rewiring Your Self to Break Addictions and Habits: Overcoming Problem Patterns*. (London - Denver, CO: ABC-Clio).
- (2012). *Metaxis and Survival: Keys to Adapting Human Consciousness*. (San Rafael, CA.: Metaterra Publications).
- DEANGELIS, A. (A Browne-Miller pen name.) (2008). *Healing Earth in All Her Dimensions: Personal and Planetary Healing*. (Flagstaff, AZ: Light Technology Publications).
- (2008). *Embracing Eternity: The Life Force Does Not Die*. (Flagstaff, AZ: Light Technology Publications).
- (2008). *Endings are Beginnings*. (Flagstaff, AZ: Light Technology Publications).
- (2008). *Transition and Survival Technologies*. (Flagstaff, AZ: Light Technology Publications).
- HUXLEY, A. (1969). *Letters of Aldous Huxley* (Grover Smith, ed.) (London: Chatto & Windus).





THE LABYRINTH OF FINANCE

CONSCIOUSNESS AND MONEY

CHRISTOPHER HOUGHTON BUDD



*Christopher Houghton Budd is an economic and monetary historian based in Canterbury, England. With a doctorate in Banking from Cass Business School, London, he works as a freelance university lecturer, consultant and advisor to a range of clients ranging from small-scale entrepreneurs to political parties. With the aim of bridging between the mind of a seer and that of modern finance, he has also made a special study of Rudolf Steiner's contribution to economics. He travels widely giving workshops in accounting, finance and financial history and is the author of several publications including *Prelude in Economics* (1979), *Of Wheat and Gold* (1988), *The Metamorphosis of Capitalism*, (2003), *The Right-On Corporation* (2005), *Auditorial Central Banking* (2006) and *Finance at the Threshold* (2011).*

IN THE LAST THIRTY YEARS I HAVE BEEN ON A JOURNEY that I describe as going into the labyrinth of modern finance – an image that for me has several nuances or resonances. Firstly, it always reminds me of Octavio Paz's *Labyrinth of Solitude*, a book whose allusion to the loneliness of the individual in a rational society made a big impression on me in my heady days as a twenty year-old in Berkeley 1968. Paz wrote: 'Solitude is the profoundest fact of the human condition. Man is the only being who knows he is alone, and the only one who seeks out another. His nature – if that word can be used in reference to man, who has 'invented' himself by saying 'no' to nature – consists in his longing to realize himself in another. Man is nostalgia and a search for communion. Therefore, when he is aware of himself he is aware of his lack of another, that is, of his solitude!'

Secondly, the labyrinth is an image of the brain, within whose convolutions we fancy that our consciousness has its seat and that there our thoughts have their origin, rather than – as I aver – their reflection. This is especially so as regards economic life when understood not as the allocation of scarce resources but as the expression of what lives in our will life, in our unconscious motives and promptings. It is here, too, that we find the source of social concern, concern for others not only oneself, but

concern also for the well-being of the economy as such.

But the labyrinth also reminds me of Theseus, the King of Athens's son who set out to vanquish the Minotaur in his cave-maze. Thanks to Ariadne's thread – a metaphor for feminine insight? – Theseus, the male thinker, was able to confront and overcome the Minotaur, then make his way back out of the cave and home². But what was the Minotaur – the bull-headed man – other than a picture of human will untrained, undisciplined, uncoordinated, uncohered? This has long been the human challenge. Even Christianity predicates itself on this: "Nevertheless, let Thy will be done."

Fourthly, the labyrinth refers to modern economic life – a convoluted affair to say the least – in which free will is championed without its necessary counterpart: freely undertaken responsibility. For what is free trade in its untoward expression except uncohered will life, people doing what they will and deeming those actions thereby normal? It is the ultimate 'triumph' of positivism to proclaim that the old consciousness whereby physical deeds are constrained by and obeisant to moral injunctions has been superseded by the idea that whatsoever we can do physically gives us our moral code.

As Valeria Mosini so persuasively and eloquently argues, "[it is important that positivist economics] be supplemented with moral and social considerations so as to reflect the interest of the whole community³." To which she adds that "will, combined with hope, can provide a powerful propeller potentially capable of unravelling [the neoliberal] paradigm [...]"⁴.

Much as positivism has reality in human history, for we cannot become truly human if we remain bound by an atavistic understanding of life, it is not the end of the story. The next stage, and our future for a long time to come, entails acting neither out of moral edicts issued *ex cathedra* nor out of what one can get away with. In fact, social conscience arises between the two. Just as a seed unfolds downwards as root and upwards as shoot and has as it were to live between finity and infinity, so do human beings find their true place between freedom and responsibility, between self-centred anarchy and respect for one another.

But the labyrinth is also a metaphor for central banking – that is, for understanding money societally. Not as

something private only, but as something we share. Like air and light. Just as we breathe one another's air and depend on the daily rising of a sun that we all 'own' in common, so we use (or, less prosaically, enjoy) one another's money, goods and talents, while depending on universal price stability.

DEEDS FIRST / IDEAS SECOND

In economic life ideas follow deeds. The last thing is new ideas. The first thing is to act intent on a new paradigm. The explanation of it, whatever explanation one is attracted to, comes after. I do not ascribe my life-long involvement in economics to what I find around me, but to an inner insistence – idealistic and quixotic may be, but nevertheless sustaining – that we can and therefore must understand and do things in economics differently. Meaning less self-centredly.

In regard to economic matters it is relatively easy to change or at least talk about new ideas, but this can and for the most part is done without affecting the will. The habits remain unaffected. The reverse is a more interesting possibility: that people first change their habits then see what ideas they come up with. For those would make them primary, antecedent to action, the question is how do ideas about economic life create the will forces that a person needs in order to act differently? In my experience, by simply acting in a right way. The ideas then follow.

Even Newton was aware that explanations follow insights. As British economist John Maynard Keynes said of him in 1946: "There is the story of how he informed Halley of one of his most fundamental discoveries of planetary motion. 'Yes,' replied Halley, 'but how do you know that? Have you proved it?' Newton was taken aback – 'Why, I've known it for years', he replied. 'If you'll give me a few days, I'll certainly find you a proof of it' – as in due course he did." In short, one knows out of one's will before one knows in one's head. This is especially the case when it comes to economics. Indeed, that is *the* problem with modern economics – it thinks it can first have an idea followed by an action.

But the problem goes even deeper. The epistemology and resulting ontology of modern economic life acts – hundred-monkey fashion – directly to block the will life of humanity as a whole. Conversely, if we would just get ourselves on track through what we do rather than what we say, the effect would be like the sun suddenly shining on a dull, dreary day. People would realise something that they are otherwise unable to realise, even if they want to.

As the peripatetic philosophers of olden times might have said, beware ideas had when sitting down, not moving. Or as Americans might say today: walk your talk.

THE BRAIN AS BOX

This is a difficult path to identify, let alone keep to – especially for those free spirits who believe their freedom comes *without* responsibility and who accept no outer constraints whatsoever. As deep liberationists of finance, the John Galts of this world, they forget or are unaware that, as C. Wright Mills once put it, the 'cherished values' of freedom and reason belong together⁶, and so become enamoured of Ayn Rand's incessant attack on collectivism and her belief that true social order results from atomised individualism.

Modern economic understanding is trapped in the brain – which we believe to be the origin not the reflector of consciousness, even though we constantly call on ourselves to 'think outside the box'. Yet what is that box if not the brain – a metaphor, if ever there was one, for the out-dated, no longer valid, imprisoned light of the past, but not the source of tomorrow's true enlightenment, by which measure the Enlightenment of the 18th century will be a poor pale cousin. Indeed, the event that modern economics so earnestly celebrates might be better described as an *Endarkenment* – as the light of ancient times going out, becoming shrouded by rationalism.

Only it is not rationalism – at least not when it comes to economics. Rationalism implies and entails consistency, yet where is the consistency in overthrowing the gods of savages and replacing them with the deism of 'the market'? Where is the consistency in insisting on what the physical senses alone provide as evidence of reality, yet predicating an entire economic philosophy on a hand that no senses can perceive? Where is the consistency in resting finance on free market principles (namely, the freedom to risk one's capital as one will) then expecting any losses on failed bets to be refunded by 'the taxpayer', a term as disingenuous as the rationale it represents. For where in the entire universe would taxpayers line up to refund the losses of gamblers as they leave their casino?

DOUBLE-ENTRY BOOKKEEPING

The only one way to get beyond our private, physical brain boxes is double-entry bookkeeping – a technique which one may not know of, or not understand, but which exists nonetheless. And not because

it has been described. It is simply there. Fortunately, it also has an archetypal nature, meaning that it exists independently of statements from gods on high *and* independently of merely physical human action. Moreover, it is a technique representative of a deep human truth, namely, there is never a debit without a credit. That is, one can always see the counterpart of one's actions, one's will life. On the one side one's motives and on the other the effects of what one does.

Every transaction has a debit side and a credit side. The transaction itself however is neither. So it is in human economic action. By the very way we live economically (which for most of us today means financially or monetarily) we live between our intentions and our effects. Through debit and credit we can see our will life; now before, now after. For it can never be seen at the moment of acting. Just as the eye cannot see itself.

This is why human beings become discrepant to reality and to their true selves. Why they can think what cannot be done and do what cannot be imagined. And why they do what they know 'should not' be done. But this is also the purpose of money – to separate ourselves from externally provided mores, on the one hand, and to prevent us falling into mendacity on the other.

This is the deeper purpose of double-entry bookkeeping – to allow us to avoid (more realistically, overcome) mendacity. Not to delude ourselves on the journey towards freedom. As Shakespeare put it in the cautionary remark he placed in the mouth of Polonius in *Hamlet*:

*Neither a borrower nor a lender be;
For loan oft loses both itself and friend,
And borrowing dulls the edge of husbandry.
This above all: to thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man⁷.*

Why did Shakespeare get Polonius to say that? Because of the age he lived in, because of the deep change in consciousnesses that then took place, whereby what had previously been given to human beings from outside had now to be found in an individual's conscience. This great reversal of the logic of ancient morality, this huge trust on the part of history in human beings' ability to be moral *out of themselves*. Hence the Renaissance, the beginning of the birth of wisdom from within human beings, requiring them to discover universality within their newfound individualism.

In art we see this in the appearance of perspective. In money the same phenomenon appears as double-entry bookkeeping – the ability to look out at the world and in on oneself from the world's point of view. No wonder that more perceptive economists see the distance of their craft from the methods of Luca Pacioli – the monk most associated

with double-entry bookkeeping – as a measure of its viability and justification.

Arjo Klamer and Deirdre McCloskey, for example, some time back stated that, "In view of its importance in their work economists could be expected to have an interest in accounting. Once they did. But now they don't. For all practical purposes the accounting metaphor in economic discourse is dead and its reputation buried with it. Having been participants in the shunning of accountants, we economists are now [...] impelled to ask what would happen if the accounting metaphor were to be revived."

First economists would have to change their thinking about the history of economics. The shunning of accounting is plain in all the histories. Almost none discusses the interaction between economics and accounting. Joseph Schumpeter's *History of Economic Analysis*⁸, the most comprehensive and exhaustive, contains only three references to accounting. A reference to Fra Luca Pacioli and the idea of double-entry bookkeeping was deleted by Schumpeter but then reinstated by his wife, who edited the unfinished manuscript after his death⁹.

More recently, Alan Sangster and Giovanna Scataglini wrote: "Pacioli's pedagogic mission as revealed in his treatise [is] to encourage learning through engagement; to educate, not just in techniques but, also, in the related issues without which the mechanics, while perfectly executed, are performed oblivious to the world in which they are used [...] Pacioli not only taught his students to comprehend the language of double entry bookkeeping and prepare the entries by which it is composed, he explained why it was important to do so and did so by setting his teaching in a business context to which they could all relate¹⁰."

MULTI-PERSPECTIVE / A SOCIAL BRAIN

But double-entry bookkeeping has been around for over 500 years. Now what happens? Now nothing can happen except and until everyone uses it. There is no further technique to develop. No need for triple bottom line accounting or ethical auditing. What is possible is that the technique becomes used universally, not only by experts (accountants, etc.) and not merely as an adjunct to business. Double-entry bookkeeping is a means for becoming aware of one's will life, of what lives in one's will, what one intends to do. This, of course, has to come to free expression, hence 'free will'. But the question then becomes how to cohere the 'free' will of the one human being with the equally free will of all other human beings.

At this point, the metaphor is no longer the labyrinth, but many perspectives in the one picture – a fine example being Chagall's 1911 painting *I and the Village*. This is the only possible step after the appearance of perspective. Just so, the only possible equivalent in the realm of money is universal use of double-entry bookkeeping. When individuals, organisations, governments and companies sit together and look at one another's accounts in order to see what the true price should or could be, or where capital is best needed (and then allocated by magnanimous transfer not by penalising bonds), then we will have an image of economic conduct appropriate to today's world economy, today's one-world village.

Then consciousness will change, not out of ideas but out of awareness of one's deeds. Admittedly, this is a subtle, hardly discernible difference, but it is not a splitting of hairs or an exercise in semantics. Then, too, we will see – already in modern economic life – that a new will exists, a new paradigm is struggling to express itself.

It is hampered only by our belief that ideas are the origin of economic reality, when in fact they follow on. Children are not now sent up chimneys because the law prevents it. The law prevails because people would no longer wish to send a child up a chimney than be sent up there themselves. Just as ideas follow deeds in the economic realm, so laws clothe intent and enshrine spiritual values but do not beget them.

Modern understanding of economic life sits midway between an old way of being that is no longer valid, but hangs on, and a new future that has yet to gain traction. Between blood relationships that connect one's awareness to one's blood family, and free yet responsible deeds that link one to the entire human family, but not via the blood. Humanity's shrinking into self and self-interest is an inevitable stage and part of history. Of itself, however, it is not a place that can sustain the human being. As the light from the ancients goes out, so does the light of tomorrow need to come on, albeit with a moment in between, otherwise we will simply exchange our slaveries. That moment ought not to last long, however, nor should we linger lightlessly for too long.

UNITED BY INDIVIDUALITY

All ancient cultures envisage humanity ultimately as a whole, as did the Beatles when they sang, 'I am you and you are me and we are all together!' But so did Marx in his own way. And it is to this ultimately that 'the wisdom of the market' also alludes. To think of the other in economic life, not just oneself – and even better to think on behalf of the economy as such as something living not mechanised – is

to link oneself to a distantly united humanity. Better put, it is to be an emissary from that future world. Coming through the threatening darkness of finance today can be seen the suffusing light of that distant time.

The wonder of double-entry bookkeeping is that no god ordains it and no human being can possess it. It is simply there, but it is so at the most atomised moment in human evolution – when one is alone with one's net worth, thinking of it as an asset when in fact it is a liability (the asset of everyone else, in other words!). At that moment, and in a time when spiritual evolution takes place through economic evolution, the only orientation available to the modern mind is double-entry bookkeeping, precisely because it has both moral and earthly reality yet belongs to neither realm.

Double-entry bookkeeping serves as the very means by which we can escape our individual brains and create together a kind of shared or social brain. Still not a brain in which ideas originate, but one in which we can see our collective will reflected. We are not made any less individual because of this. On the contrary, it enables us to understand the central paradox of our modern economic lives, namely, that individuals, as the very word suggests, cannot be divided. ☉

¹ Paz, O. (1961). *The Labyrinth of Solitude* (New York: Grove Press): 195.

² In his joy he forgot to raise the white sail to signal his success to his father at Sounion, who, thus ill-informed, flung himself needlessly off the cliff top. But now I am digressing from my focus.

³ Mosini, V. (2011). *Reassessing the Paradigm of Economics* (London: Routledge): 45.

⁴ *Ibid.*: 139.

⁵ John Maynard Keynes: *Newton, the Man*. A lecture delivered posthumously in July 1946 by Keynes's brother, Geoffrey Keynes.

⁶ Wright Mills, C. (1971). *The Sociological Imagination* (London: Penguin): 194.

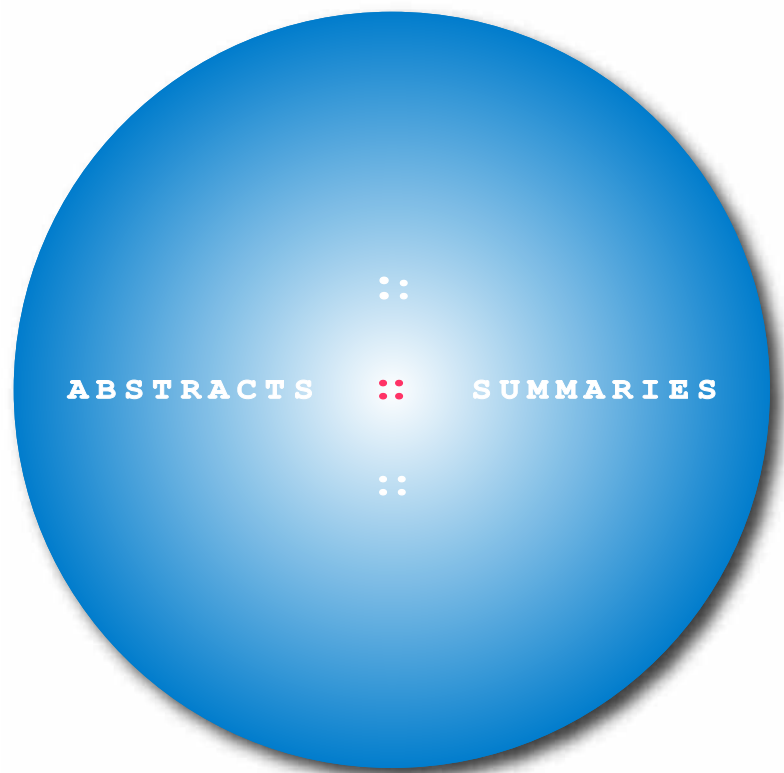
⁷ Shakespeare, W. (2006), *Hamlet* (London: A&C Black – Methuen): I, (III): 75-80.

⁸ Schumpeter, J.A. (1954). *History of Economic Analysis* (Oxford: Oxford UP).

⁹ Klamer, A and McCloskey, D. "The Economics of Scientific Publication", in *European Accounting Review*, 1.1 (1992): 145-160.

¹⁰ Extracts from 'Luca Pacioli, The Father of Accounting Education'; paper presented at the 22nd Annual Accounting, Business & Financial History Conference, Cardiff 6th and 7th September 2010. Alan Sangster is at Middlesex University Business School, London; Giovanna Scataglini, Balliol College, Oxford.





ABSTRACTS

::

SUMMARIES

MICHAEL D. AUSTIN
DREAMING EARTH

We live by the grace of our planet. Through lenses including Gaian consciousness, recent laws and local or personal sketches in economics and natural history, the author explores how consciousness and development have interacted from a personal level to a scalable, planetary one. Humankind's most effective actions in sustainability, consciousness and development could be distilled into compassionate living, connected to Earth in all our policies.

Billions of people are examples in awareness of their own microcosm, each in their own environment. But, to be successful in consciousness or development, one's personal experiences must be made accessible and shared. This is because humankind's collective voice, expressed in individual, daily choices will change the world or make it the same. In the aggregation of our individual experiences and compassion we'd find our salvation in sustainability by our own hands. | [181-195].

CHRISTOPHER BACHE
TEACHING THE NEW PARADIGM

This article examines the collective-mind phenomenon in the context of classroom. While not negating the power of the individual mind, the article seeks to illuminate the growing body of research that suggests that our actions and intentions affect each other is still not completely understood ways. Contrary to traditional, top-down classroom approach where the teacher was active instructor and the student relatively passive learner, the author offers a new model. Citing his own experiences, as well as research by others, he explores the interconnectivity of people's minds, particularly those in a learning environment.

There is a nascent understanding of how collective fields of consciousness work in groups and the discovery of a true collective intelligence – "synchronicity". This concept involves the simultaneous transformation of both teacher and student, set off by the energy transferred back and forth. The concept of group consciousness revolves around the idea that groups share a "collective mind". This group mind comes about when there is communal intention focused in an emotionally engaging group project, project of sustained duration, and repetition of the project. In this environment the class is a transformational journey that the entire group embarks on together; the teacher learns from students, students learn from one another, as well as the conventional learning provided by teacher. | [173-179].

WALTER BAETS
CONSCIOUSNESS AND COHERENCE
IN CORPORATE SUCCESS

Conventional rubrics for succeeding in the business world have placed emphasis on the external individual sphere. This article prescribes a more integrative approach for

understanding intricate systems, corporate environments in particular.

The author piggybacks onto the body of research that relates biological function and synchronicity with the way that humans act in groups. This research contributes to an understanding of organizations in order to deconstruct the processes such as consciousness or coherence using artificial neural networks.

Complex living systems, such as human beings, are comprised of diverse connected, networks of biological structures and processes. The author attempts to construct a framework by which corporations are understood by similar means.

The author issues a call for further research using a "first person" approach to investigate the way that system elements influence one another by way of their network, as opposed to hierarchical or cause and effect relations. | [207-212].

RAYMOND TREVOR BRADLEY
NONLOCALITY, CONSCIOUSNESS,
AND THE EYE OF LOVE

A large body of experimental evidence has documented the nonlocal nature of consciousness – intuitive knowledge of remote or future events, and the effects of mind on matter and on living systems – as a scientific fact. Recent studies, using electrophysiological measures of autonomic nervous system activity, have shown that such nonlocal interaction is related to the degree of emotional significance of the remote/future event. Moreover, there is also solid experimental evidence that intentionally focused bio-emotional energy can have a subtle but significant – scientifically measurable – effect on nonlocal objects and events. Drawing on these findings and the principles of quantum holography, a speculative theory of nonlocal consciousness is presented. The theory describes how love, as *passionate attention*, enables the individual to intuit nonlocal information, and, as *passionate intention*, empowers them to have some influence on the actualization of a nonlocal event of interest. Interacting with the incoming energy fields radiating from all objects and events, the outgoing energy field of love, which is coherent, operates like a *holographic* lens – the "eye," *in-forming (giving shape to)* the intuitive perceptions and actions by which the conscious self operates as a willful, creative agent. It is the individual's bio-emotional resonance – via love – to a domain of energetically encoded quantum-holographic information, beyond space and time, which provides access to the order of implicit potentials in the universe. In short, love's attunement to this energetic domain of consciousness is the means by which foreknowledge of nonlocal events can be intuitively accessed and, to some degree, intentionally affected. | [193-205].

ANGELA BROWNE-MILLER
SURVIVAL INSTRUCTIONS: CONSCIOUSLY
ADAPTING AND ENHANCING HUMAN CONSCIOUSNESS

The survival of the human species is to a great extent in our hands, or better stated, in our minds. Expansions of the reaches, capabilities, dimensions, and dominions of the human mind and consciousness are indeed within our

grasp. Even the notion of expansion begs further exploration now, a highly conscious, intelligently purposeful, exploration. On the frontiers of ourselves, we have the option to choose to be conscious and aware of our presences and our options. All fields of human endeavour, including but not limited to spirituality, linguistics, neuroscience, genetics, physics, psychology, sociology, anthropology, the arts, and so on, must step forward to make conscious evolution, even conscious adaptation, of the human consciousness very high on the agenda. Species survival may depend on this. Species definition as an inter-dimensional life form is essential. | [247-257].

ANDREW COHEN
THE EVOLUTION OF ENLIGHTENMENT

Teachings of Spiritual Enlightenment traditionally point seekers to discover the infinite, timeless Ground of Being, also called Emptiness in Buddhism. In this discovery, one experiences liberation from or transcendence of the world of time and form. I had a classic experience of this kind of awakening in 1986, but soon found that a traditional approach such as the one I had been taught was inadequate to meet the needs of the contemporary seekers who were coming to me and the Western cultural milieu of our time. Through many years of contemplation, conversation, and inquiry, I discovered a new source of spiritual enlightenment – not the formless domain beyond time, but the energetic impulse that is driving the entire life-process forward *in* time. I call this the Evolutionary Impulse. Based on this discovery, I have formulated a new spiritual approach, which I call Evolutionary Enlightenment, which marries traditional Eastern wisdom with a contemporary Western understanding of evolution. | [141-146].

ALLAN COMBS
COYOTE ENLIGHTENMENT. A STORY
OF EVOLUTIONARY SPIRITUALITY

Here is a story of evolutionary spirituality. It is a story that has been told in many ways throughout human history, and in many cultural settings. The forms it takes always reflect the ways the world is experienced by the teller and the listeners, in other words, the form of consciousness in which they are bathed. Modern accounts of evolution and spirituality emerge from mental consciousness, which dominates our own age. Earlier forms of consciousness, for example steeped in magic and myth, created their own stories of spirituality and transformation. The future holds possibilities of still other forms of experience, and with them different forms of spirituality and transformation. These are hinted at in contemporary trends seen in art, literature, science, and spirituality itself. | [147-156].

MATTHIJS CORNELISSEN
CONSCIOUSNESS, KNOWLEDGE AND THE FUTURE
OF HUMANITY: A MINIATURE OVERVIEW
BASED ON THE WORK OF SRI AUROBINDO

Humanity is rapidly moving in a direction that seems to take it dangerously close to collective madness and self-destruction. One of the reasons, or at least one of the

major symptoms of the present difficulty is that the dominant knowledge system of our proud and powerful global civilization has a far too limited understanding of consciousness and the role it plays in the creation.

In this essay I will delineate three archetypal ways of conceptualising consciousness, and eight ways of knowing reality, whose understanding might help us to find a way out of our present imbroglio. | [163-171].

CHRISTIAN DE QUINCEY
EMBODIED MASTERY: USING PHILOSOPHY
TO IMPROVE PERFORMANCE IN THE
MARTIAL ART OF EVERYDAY LIFE

This article delves into the way in which physicality can instruct our internal mental state and performance, with the concept of *process metaphysics*. This is the philosophy of embodiment that can be applied anywhere in life. Process martial arts is a way in which to become aware of the exchange between the choices your body makes at a cellular level and the choices you make as a whole organism; to master the interchange between the choices of your cells and those choices of you as a collective organism, and to engage in a more comprehensive dialogue between you and your surroundings, including those entities with different, and perhaps competing, goals.

Process mastery is dependent on both physical and mental facility. Attitude is of critical importance because of the manner that it influences the way in which we view the world and thus, the way that we respond to stimuli in either positive or negative ways. A requirement in the pursuit of process mastery is to engage with the world in an open, positive way as this allows for an individual to become aware of the array of possibilities available in life.

Mastery in martial arts is conducive to bypassing fear and aggression and achieving a positive, receptive frame of mind to external stimuli. By becoming more receptive to your opponent you gain the opportunity to transpose the conflict into a more sympathetic, collaborative encounter. | [213-217].

JEFFREY EISEN
CLEARING TO HOLOSENTIENCE
AND LEVEL II ENLIGHTENMENT

In these transitional times, we often hear Einstein's quote that no problem can be solved from the same consciousness that created it, and by that, we are admonished to change our consciousness. But what exactly is being asked of us, and how does it work? From my long-standing perspective on the central role of perception in creating form in duality, it becomes clear that perception itself must shift. In this paper, I introduce two vital aspects of the required shift in perception: 1) the advent of intentional clearing. In this we clear from the nondual realm in order to relax and dissolve egoic contractions; 2) the resultant emergence of a holosentient perception, the ability to perceive 'in the round', a kind of holographic awareness of whole systems. Together, these aspects point to an underlying process of increasing awareness that goes beyond the consciousness that created the present global situation, even beyond much of what we read about enlightenment. My holosentient perception is

that by using intentional clearing toward the capacity to perceive holosentiently, we are learning to integrate nonduality and duality, and thus, developing our full potential as human Beings. | [157-162].

RIANE EISLER
BREAKDOWN OR BREAKTHROUGH: CULTURE,
CONSCIOUSNESS AND HUMAN DEVELOPMENT

We stand at a crossroads between a violent, fractured and unequal world and a sane humane one. People's belief systems can help to propagate such cruel and unjust universe, such as the belief in original sin or belief that man's biology is inherently selfish or animalistic in nature. These ways of thinking fail to acknowledge the deep caring and consciousness so common in human nature. In order to bring the focus back to humanity's capacity, the author proposes three questions: What kind of cultures support or inhibit the expression of human capacities for caring consciousness and creativity? What kinds of cultures support our capacities for cruelty, insensitivity and destructiveness? And what can help us create the conditions for positive capacities to develop and flourish? The author developed a new system of social classification that pays particular attention to primary human relations, meaning the childhood relations and relations between male and female portions of humanity that are crucial to development and survival of the species. Dividing these into a *partnership model* and *domination model*, she deconstructs these paradigms influence on society at large. Violent and repressive societies stem from the domination model: characterized by hierarchical rankings in families, state or tribe, exercised through physical, psychological and economic means; the dominance of men over women and culturally accepted predominance of abuse and violence. The partnership model contrasts sharply: an egalitarian structure in both the family and state or tribe; equality between the sexes; and a hold a disapprobation of violence. These nations who skew to the partnership model consistently have better quality-of-life metrics than those who follow the domination model.

This relationship between these two models can be traced back throughout evolution of mankind, indeed can even be witnessed in the animal kingdom. More hospitable circumstances lend themselves to the partnership model, hardscrabble or precarious circumstances usually precipitate the domination cultures.

The author concludes by recommending we look at how the two models of societal domination or partnership interact with our own minds. Doing so will help to prevent regression and build on the momentum towards a world full of more partnership type societies and thus a more peaceful, just and sustainable world. | [123-130].

GEOFF FITCH
EVOLUTIONARY ETHICS

Several theorists have described a spectrum of evolution of consciousness that includes human development and spans the great domains of concrete, subtle, causal and non-dual worlds, as well as an evolutionary, non-dual understanding of the cosmos. Foundational conditions

of the cosmos itself reinforce a developmental view of ethics and suggest several principles for ethical awareness and action, given an evolutionary perspective. These principles include the impulse towards greater individual and collective development; the loving embrace of what is existent; and paradoxical understanding and transcendence of dualities inherent in development. This paper explores the ethical potentials of the challenges we face today, in light of our understanding of the evolutionary development of consciousness, and examines ethical principles founded on the essential conditions of the cosmos – evolution and non-duality. | [117-122].

MARC GAFNI
THE FUTURE OF THE HOLY: FROM SEX TO EROS

This article unpacks the relationship between the sacred, the erotic and the sexual. Emergent from the Kabbalistic tradition the essay asserts the virtual identity between eros and holiness, while discerning significantly between the sexual and the erotic. Eros is understood to express itself in four major facets. The four faces of eros are interiority, fullness of presence, yearning, and wholeness or the interconnectivity of being. The sexual is not alienated from eros but it is also not identical with eros. Rather, and this is the core thesis of the essay, the sexual – in its ideal form – models the erotic. More precisely the sexual models the erotic but it does not exhaust the erotic. The qualities of eros are accessed and modelled more easily and elegantly by sex in its idealized form. However, the goal of life is to live erotically not merely in the sexual, but in every facet of being. The limiting of erotic life to the merely sexual is understood to be the exile of the Shekinah, the Hebrew mystical term for the feminine presence of the divine. The full incarnation of eros in every dimension of life is an expression of "Temple Consciousness". | [131-139].

ASHOK GANGADEAN
SPIRITUAL TRANSFORMATION AS THE
AWAKENING OF GLOBAL CONSCIOUSNESS.
A DIMENSIONAL SHIFT IN THE
TECHNOLOGY OF THE MIND

The author posits that there are times in the course of history in which humanity undergoes comprehensive and profound transformations and that one such shift is occurring at the moment, a "tipping point". In order to cope and deal with the radical changes inherent to such a shift, people must adapt through altering their consciousness. The key to this adaptation is, in the author's words, an "access code" to an "enchanted universe", whereby one attains consciousness that reality is a holistic field of information and dynamic connectivity. This global consciousness will realize certain things, one of the most important is what is referred to here as "collective global wisdom", that humankind shares in the creation of reality and the universe, through their interpretive abilities. Gangadean believes this world-shaping – or the way our internal worldview and narrative have the power to change outward reality – is the highest human art.

The essay concludes that through the technology of natural reason lies the direction for the future choices that

need to be made in the wake of the current global transformation. | [29-35].

AMIT GOSWAMI
INNER CREATIVITY: A NEW PARADIGM
FOR ADULT SPIRITUAL DEVELOPMENT

Quantum physics has given us a new scientific worldview based on the primacy of consciousness. One of the outstanding aspects of this worldview is that it includes both spirituality and materiality and in this way gives us a framework for discussing adult spiritual development that is the subject of this article. | [17-28].

STANISLAV GROF
2012 AND HUMAN DESTINY: END OF THE
WORLD OR CONSCIOUSNESS REVOLUTION?

Stanislav Grof challenges the current interpretation of the Mayan calendar as predicting the end of the material world on December 12, 2012, arguing for a different perspective on the Mayan prophecy. As this date draws closer, it gathers more attention from the media and entertainment world, all morbidly reflecting on the anticipated doomsday. Many other cultural and religious traditions contained similar prophecies about the end of a great cycle, seemingly lending credence to the ancient prediction. Grof suggests a more positive explanation of the Mayan prophecy, that instead of destruction and annihilation of the world, it refers to an existential death and rebirth of humanity; the psycho-spiritual transformation of the current world order into something new and better.

Ultimately, we are entirely responsible for which version of the prophecy comes to pass. Grof concludes that we are facing a definitive crisis, if we continue on our current destructive path, we as a humanity is unlikely to survive. But there is hope, if enough people undergo a process of deep spiritual transformation, and reach a level of consciousness deserving of the name bestowed upon our species: Homo sapiens. | [1-12].

GAIL HOCHCHKA
ENGAGING THE PLAY OF CONSCIOUSNESS
IN SUSTAINABLE DEVELOPMENT

Drawing on experiences in sustainable international development, it is suggested that global wellbeing involves the development of consciousness, as it arises in self, behaviour, culture and systems, from a place of deep presence in one's own awareness. With an integral approach to international development, as written about by Ken Wilber and practiced by numerous individuals and organizations involved in international development, integral practitioners bring a particular understanding of consciousness into the practice of development. This includes laying emergent ground both the transformations in consciousness as well as fostering greater health in existing expressions of consciousness, all the while engaging practices that support a quality of presence or wakefulness in one's own awareness. An example is given of how consciousness is engaged in development,

from the perspective of Integral approach, in a leadership for sustainable development project in West Africa. | [75-82].

CHRISTOPHER HOUGHTON BUDD
THE LABYRINTH OF FINANCE.
CONSCIOUSNESS AND MONEY

The author seeks to untangle the maze of modern finance. The image of the labyrinth is symbolic of central banking and used as a way to understand money in a social way. It helps to understand that money is not simply a solely private matter, but a social, shared common good. Just as we share the air and water, we reciprocally use and enjoy one another's money, goods and talent. Dr Houghton Budd calls for the incorporation of "double-entry bookkeeping" into modern finance. This is a more holistic means of accounting, meaning there is never a debit without a credit, with every transaction there is consideration of one's motives on the other, the effects of what one does. Thus we live economically between our intentions and our effects. Double-entry bookkeeping represents a way in which we leave our individual brains behind and forge together a "shared" or "social" brain, where our collective will prevail. | [259-262].

ERVIN LASZLO
TWO WAYS OF KNOWING THE WORLD:
DISCOVERING THE REALITY OF
NON-SENSORY PERCEPTION

Historically humans have been seen as interpreting the world solely through their neuroaxonal network, or more colloquially, their senses. Professor Laszlo argues against limiting human experience to sensory experience as new evidence appears to support that there are actually systems in which our brains synthesize data from the outside world: the macro-level neuroaxonal networks and the sub-neural quantum-level networks. The latter derives from direct-intuitive nonlocal perception that recognizes more subtle effects that usually operate under the radar of our conscious awareness.

Entering altered states of consciousness, such as through prayer or meditation, allows for individuals to experience the world in different, more comprehensive ways. Too often, these alternate experiences are derided as imaginary and disregarded. However, researchers found that a group of individuals achieved both greater internal synchronicity (between left and right brain hemispheres) as well as inter-personal synchronicity through meditation. These effects were found even though the test subjects were comparatively "walled off" in terms of their senses. It seems as though the way we think of human perception needs to be revisited. | [37-39].

ROBERT AUGUSTUS MASTERS
THE ANATOMY OF INTUITION:
THE EVERYDAY TRANSMISSION OF
NON-CONCEPTUAL KNOWINGNESS

Intuition is a trait native to all humans, what we do with it, however, varies greatly from person to person. For something so universal it is often ignored or written off as a

non-rational, almost imaginary phenomenon. This article describes intuition, underlining its importance and the need to cultivate an awareness of it.

The author sees intuition as a neutral phenomenon; it is neither “good” nor “bad”, though the resulting actions may be ascribed with those adjectives. If we do not hear or perceive our intuition, it is not because it’s not there, but rather, we are not being open to it. Ironically, for many people being able to interpret and understand intuition is not intuitive.

However, it is possible to make oneself more receptive to intuition by gathering relevant material, quieting one’s mind and freeing oneself and listening deeply in order to recognize the sometime barely perceptible knock of intuition.

The author underscores that intuition is not a singularly personal experience; it can also be a shared experience that links a group together. Like a bolt of lightning, an immediate current that flows through everyone, intuition has the ability to unite separate beings with a deep bond. It is an occurrence that deserves our deepest reverence and attention. | [13-16].

ROLLIN MACRATY
~ ANNETTE DEYHLE

COHERENCE AS A CATALYST FOR PERSONAL,
SOCIAL AND GLOBAL HEALTH, AND THE ROLE
OF THE GLOBAL COHERENCE INITIATIVE

Complex living systems, including human beings, are composed of numerous dynamic, interconnected networks of biological structures and processes. Coherence implies order, structure, harmony, and alignment within and amongst systems – whether in atoms, organisms, social groups, planets, or galaxies. Thus, every whole has a relationship with and is a part of a greater whole, which is again part of something greater. In this context, nothing can be considered as separate, alone, or lacking relationships. Aspects of coherence are reflected in physiology and can be objectively measured. The concepts of coherence can also be applied at the social level, and by increasing our personal coherence the benefits are not only reflected in improved personal health and happiness but may also affect and be reflected in a global field environment through which all living systems are interconnected. All across the planet, increasing numbers of people and groups are practicing heart-based living, meditation, and prayer that support positive change and creative solutions for manifesting a better world. The Global Coherence Initiative (GCI) is a science based, co-creative project to unite people in heart-focused care and intention. It is working in concert with other initiatives to realize the increased effectiveness of collective alignment. Every cell in our body is bathed in an external and internal environment of fluctuating invisible magnetic forces that affect numerous physiological rhythms in humans and global behaviour. The most likely mechanism for explaining how solar and geomagnetic influences affect human health and behaviour is a coupling between the human nervous system, heart and brain with and Schumann resonances which occur in the earth-ionosphere resonant cavity and

other resonant geomagnetic frequencies. We are not only synchronized with solar and geomagnetic activity, but disruptions in these fields can create adverse effects on human health and behaviour. In order to conduct this research a global network of 12 to 14 ultrasensitive magnetic field detectors specifically designed to measure the earth’s magnetic resonances is being installed strategically around the planet. It is postulated that as increasing number of people add coherent energy to the global field, it helps strengthen and stabilize mutually beneficial feedback loops among human beings and with the earth’s energetic fields. Furthermore, one of GCI’s goals is to test the hypothesis that large numbers of people when in a heart-coherent state and are holding a shared intention, can encode information on the earth energetic and geomagnetic field, which can act as a carrier wave for biologically patterned and relevant information. | [83-95].

SAHLAN MOMO
THE MESOTERIC LEAP

The author identifies and defines the *mesoteric* state of consciousness between the *exoteric* and the *esoteric* planes as the dimension in which both the individual and humankind as a whole are shifting. It is not an altered state of consciousness, but the real ‘human’ collective dimension that links spirit to matter on the *tensorium* within consciousness and is characterized by the ever ‘present’ devoid of space and time. While the global crises is grinding into pieces the last phase of the current civilization, the merging of spirit and matter in the mesoteric consciousness is giving rise to a new collective culture and forging unprecedented development models consonant with a nonprofit society in which the rewarding awareness of being helpful in co-creating the common good is the real priceless profit. | [V-XII].

ROGER D. NELSON
GLOBAL CONSCIOUSNESS. EVIDENCE
FOR AN EMERGENT NOOSPHERE

A long term, continuing experiment called the Global Consciousness Project (GCP) looks for non-random structure in synchronized random data streams generated during major events. A global network of random number generators (RNGs) records parallel sequences of random data at 65 sites around the world, and a rigorous experiment tests the hypothesis that the data will deviate from expectation during “global events” defined as transitory episodes of widespread mental and emotional response to great celebrations and tragedies. The ongoing replication experiment measures correlations across the network during the designated events, and the result from more than 400 formal hypothesis tests over the past 14 years departs substantially from expectation, with odds of more than 100 billion to one against the null hypothesis. Controls exclude conventional physical explanations or experimental error, and the experimental design constrains interpretation. The results suggest that some aspect of human consciousness is

involved as a source of the effects. The subtle structuring of random data indicates an effect of coherent human attention and emotion in the physical world, and it points to a creative quality of consciousness that can change the future from what it might have been. | [41-49].

TERRI J. O'FALLON
DEVELOPMENT AND CONSCIOUSNESS:
GROWING UP IS WAKING UP

Developmental stages have been a prominent area of research in the past fifty years, particularly beginning with child development. This has been extended into the adult realm with a number of authors and researchers focusing on developmental stages throughout the life span and there has been considerable documentation of the trajectory of development. In contrast, interest in the apprehensions of states, which people have experimented with for generations. Sages and spiritual teachers have focused on supporting people's development through state training and separate research has been conducted on states. It has been speculated that those who have higher states would also be later in their development, but research has not borne this out. This article investigates the intersection between developmental stages and apprehensions through state experiences and how they inform and support each other. It supports this investigation with current, relevant research, which suggests that growing up developmentally relies on waking up through states and waking up also relies on growing up through the stages. | [97-103].

TERRY PATTEN
INTEGRAL SPIRITUAL PRACTICE: BECOMING
THE ONES WE HAVE BEEN WAITING FOR

For millennia, human beings have engaged in spiritual practices to grow, develop, awaken, expand, and realize their highest potentials. Now in the 21st century, something new is emerging – the widespread understanding among people in developed countries that maturation is a lifelong journey – that “all of life is a school”. The cultivation of higher maturity and “supernormal” potentials is a form of rational spirituality – one that is informed by our rich global inheritance of spiritual understandings and techniques, as well as recent psychological, neurological, scientific and technological advances. As practitioners in the information age, we are in a unique position to draw on the full array of wisdom and knowledge available, and to forge a new, more holistic and global praxis of the art of being human. Moreover, the multiple, interpenetrating crises of our time – which are not only social and systemic, but also cultural and spiritual in origin – require us to re-imagine our approach to personal development, awakening, and social responsibility. We are called to more effectively “be *and* do” the change we wish to see in the world. An “integral spiritual practice” is one way of describing such an engaged, holistic, global evolutionary way of life that can enable individuals and cultures to more rapidly matriculate through the lessons of “the school of life” in the 21st century. | [51-57].

VENITA L. RAMIREZ
LOVE, CONSCIOUSNESS & EVOLUTION

As a species, most of us live unaware of the fact that we collectively collude about many sets of assumptions that keep destructive aspects of human life in place, preventing a more rapid evolution of human consciousness and well-being. But what if we decided willingly to suspend our beliefs and assumptions? What if we opened, listened to and received a deeper wisdom through the collective intelligence of every one on earth? How might these vast resources inform one another and create unimagined solutions, visions and possibilities? How might we find a way to serve everyone and everything on the planet in a way that is fair, loving and generous? What if we were to decide we are ready for a massive transformation in our consciousness and thus in our quality of life now and in the future? In this paper, I will draw from current research on the latest known stages of human development, from eight years of experiments in an innovative transformative leadership programme, and twenty-five years of direct experience with individuals in psychotherapy. From these and other sources, I will identify perspectives and processes that could accelerate an evolved future for humanity and for all of life. | [231-239].

JOHN RENESH
THE CONSCIOUS ORGANIZATION:
WORKPLACES FOR THE SELF-ACTUALIZED

In this essay, the author describes an organizational model he has been advocating for more than a decade – the “conscious organization.” Given human's evolution toward self-actualization, our institutions need to evolve as well or face extinction. At the present time in history, nearly all societal problems and challenges are rooted in systemic dysfunction, locked in place by organizational cultures based on outmoded assumptions, beliefs and habits. The author discusses what he means by conscious, why it is being called for now and how organizations will look when they commit themselves to having a conscious culture, where light is shined on any shadowy behaviour or dysfunction by workers who are enthused and passionate about working in environments that foster more conscious behaviour, more fulfilling work and more effective enterprises. | [227-230].

TORU SATO
THE DESCENT AND ASCENT UPON
THE LADDER OF CONSCIOUSNESS

This article explores how the journey of life may involve a challenging but necessary descent into darkness and a gradual ascent into a wakeful bliss that is often perceived as the descent and ascent upon the ladder of consciousness. In the first part of the journey, the descent, we gradually lose sight of the fact that the very thing we are longing for is the very thing that is longing. In other words, we begin believing that the space that accepts and holds all of our emotions with loving presence only exists in the outside world and not inside of us. In the second part of the journey, the

ascent, we begin awakening to the fact that this space that can accept and hold all of our emotions with loving presence is not something that can only be found in others who have a deep capacity to love. Rather, it is the very essence of who we are and the very essence of every being in the universe. Once we make this all-important realization, we cannot help but live our lives with a deep reverence for all beings knowing that we all belong to each other. | [113-116].

MARILYN SCHILTZ
EMERGING WORLDVIEWS: TOOLS OF
TRANSFORMATION FOR NOETIC LEADERSHIP

As the global community seeks to manage myriad challenges and complexities of today's social and economic climate, there is a call for new skills and capacities. Research on worldview transformation suggests that people can engage in practices that support life-enhancing changes in the face of stress and challenge. The purpose of this article is to apply the worldview transformation model to noetic leadership as a transformative practice. The goal is to help catalyze positive individual and collective transformations in today's increasingly global and interconnected society and to provide new resources for leadership. Such noetic leadership tools include: worldview literacy, noetic experiences, self-reflection skills, engagement in transformative practices, holding positive images for the future, setting individual and collective intentions, developing attention-training capacities, and recognizing the value of surrender in the face of change. While there are many barriers to worldview transformations, history is a good indicator that humans are a resilient species. Harnessing creative insight offers the potential for breakthroughs to a new future for humanity. | [241-245].

DANA TOMASINO
HEART INTELLIGENCE AND EMOTIONAL
EVOLUTION: A NEXT STEP IN
CONSCIOUSNESS DEVELOPMENT

The evolution of human civilization to this point has seen impressive advances in the development of tools and technologies that enable us to interact effectively with our external world. However, as a whole, our relationship with our internal emotional experience has remained comparatively immature. This next crucial phase of humanity's evolution will invite a shift in focus inward – to the development of new internal strategies by which we can learn to effectively regulate, modulate, and direct the vast and largely untapped resource that is our emotional energy. To build this new relationship with our emotional experience will require a source of intelligence beyond the familiar but limited awareness of the mind. Heart intelligence embraces an integrated awareness that includes input from the body, mind, emotions as well as nonlocal intuitive information from a field of energy beyond the bounds of space-time. It is postulated that the heart serves as a conduit to the spirit or soul and that it can transduce information from this

larger aspect of our being, making it accessible to conscious awareness. Practices that engage the heart by activating states sourced in Love, at the individual level and in group and community settings, can facilitate the awakening and development of heart intelligence and thereby open the door to new possibilities of self-awareness and emotional mastery. The collective maturation of our ability to intentionally track, focus, direct, and modulate our emotional energy will naturally facilitate the development of humanity's intuitive and co-creative capacities. This heart-directed evolution of consciousness will transform our relationship to ourselves, our fellow beings, and our Planet, leading to greater levels of self-responsibility, cooperation, compassion, connectedness, and Love. | [57-64].

PAUL VON WARD
WORLDVIEWS AND EVOLUTION
OF HUMAN CONSCIOUSNESS

Humans now face multiple existential, global threats of their own making. The greatest obstacle to an effective global response is the lack of a working consensus on strategy. With incompatible teleological worldviews, the human community is re-tribalizing into different realities. Looking at the circumstances with different assumptions about how the universe works, religious, political, and cultural leaders cannot even agree on the problem, much less solutions. The gap between materialism and theism makes agreement on any fundamental issue impossible. Insights into the mental and emotional power of worldviews now offer a new strategy to build a more universal worldview as a basis for better world communication and cooperation. | [65-73].


PETER GARETH WALLACE
~ DENNIS P. HEATON
A CONSCIOUSNESS-BASED APPROACH
TO ELIMINATING POVERTY

His Holiness Maharishi Mahesh Yogi promulgated a system of theory and practices to achieve sustainable economic development from the foundational platform of human consciousness. Three principles of this Consciousness-based approach are presented and each principle is illuminated by corresponding verses from the traditional Vedic literature. First, the Principle of Fullness presents the concept that the inner dimension of Transcendental Consciousness is the source of the material world and that experience of this dimension can be systematically cultivated to enhance creativity, effective performance, and holistic achievement. Next, the Principle of Support of Nature explains that when thinking and behaviour are more connected to the totality of Natural Law, available in Transcendental Consciousness, fewer mistakes are created, the environment becomes supportive for easier achievement of success, and life is freer from problems. Finally, the Principle of Coherence explains how the progress of society is related to the field effects of evolving collective consciousness. | [219-225].

FRED ALAN WOLF
HOW TO IDENTIFY WITH THE
CREATOR OF THE UNIVERSE

The author attempts to reconcile the supposed gap between the inner “dream world” and outer “objective” reality. He is interested in the overlap between matter and mind, envisioning the act of creation as a symbiotic relationship where what we do affects how we do it and how we do things affect what we do.

Wolf views our quotidian experience of reality to be a gross oversimplification of the fullness of its nature. This is a function of the limitations of our senses as well as current ignorance of physics. Quantum physics and relativity have indicated that much of reality is hidden and mysterious, a fact which would be readily apparent if we could experience quantum reality. The article proposes that the core of the universe is not composed of hard reality, but is instead a *dreaming universe*.

The latest physics relates that reality is not what we think, but rather made of possibilities that appear to be solid matter. What we see as “reality” is simply a matter of relative consciousness. The fields of physics and spirituality, often viewed as being at odds, are in fact pointing in the same direction: “It is all a dream”. | [105-111]. 



*It is not certain that
everything is uncertain.*

PASCAL, *Pensée*.





SPANDA



THIRTY-3 NARRATIONS TO DISCLOSE
 THE STATE OF THE ART IN CONSCIOUSNESS STUDIES.
 FROM SPIRITUAL TRANSFORMATION TO DIMENSIONAL SHIFT,
 FROM HEART INTELLIGENCE TO EMOTIONAL EVOLUTION,
 FROM COLLECTIVE INTELLIGENCE TO THE ENVIRONMENT,
 FROM FINANCE TO NON-SENSORY PERCEPTION,
 FROM INNER CREATIVITY TO SELF-REALIZATION,
 FROM GLOBAL HEALTH TO DEVELOPMENT,
 FROM COHERENCE TO THE "EYE" OF LOVE,
 FROM GOVERNANCE TO MARTIAL ARTS,
 LOVE, GRIEF, CULTURE, AND POVERTY,
 HOLOSENTIENCE, EROTICISM AND EVOLUTION,
 ADAPTATION, KNOWLEDGE AND CONSCIOUSNESS,
 THE CREATOR OF THE UNIVERSE,
 THE NOOSPHERE AND
 THE MESOTERIC LEAP

are some of the visions unveiled in

CONSCIOUSNESS
 &
 DEVELOPMENT 2.0

AN OPERATING MANUAL

*

MICHAEL D. AUSTIN
 CHRISTOPHER M. BACHE
 WALTER BAETS
 RAYMOND TREVOR BRADLEY
 ANGELA BROWNE-MILLER
 ANDREW COHEN
 ALLAN COMBS
 MATTHIJS CORNELISSEN
 CHRISTIAN DE QUINCEY
 JEFFREY S. EISEN
 RIANE EISLER
 GEOFF FITCH
 MARC GAFNI
 ASHOK K. GANGADEAN
 AMIT GOSWAMI
 STANISLAV GROF
 GAIL HOCHACHKA
 CHRISTOPHER HOUGHTON BUDD
 ERWIN LASZLO
 ROBERT AUGUSTUS MASTERS
 SAHLAN MOMO
 ROLLIN ~ ANNETTE MCCRATY ~ DEYHLE
 ROGER D. NELSON
 TERRI J. O'FALLON
 TERRY PATTEN
 VENITA RAMIREZ
 JOHN RENESCH
 TORU SATO
 MARILYN SCHLITZ
 DANA TOMASINO
 PAUL VON WARD
 PETER GARETH ~ DENNIS P. WALLACE ~ HEATON
 FRED ALAN WOLF

\$ 45
€ 35
£ 28



ISSN 2210-2175

ISBN 978-88-7778-139-X

0 1
9 772210 217301

9 788877 781390