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# CONSCIOUSNESS & DEVELOPMENT

## TRANSFORMATION IS GEARING UP, GATHERING PACE

*Vision without action is a daydream. Action without vision is a nightmare.*

JAPANESE PROVERB.

**F**RIENDS AND COLLEAGUES have gathered here from different walks of life to share a vision. In this perennial rite of transition in which profound and powerful energies are constantly at work it is not easy to keep on course. At times the clear vision of reality is impaired by our not being completely attuned to it. So, we asked some of the awakened spirits of our time, the front-runners of this consciousness avanguard, to contribute to the issue in an attempt to take stock of the current situation and seek to shape further directions. Here are just a few words to present to you the field we are currently working on.

The surfacing to common knowledge, during the last century or so, of occurrence such as the spread of awareness that not only all humans have equal rights but also the environment has its needs, that development concerns the whole Earth and

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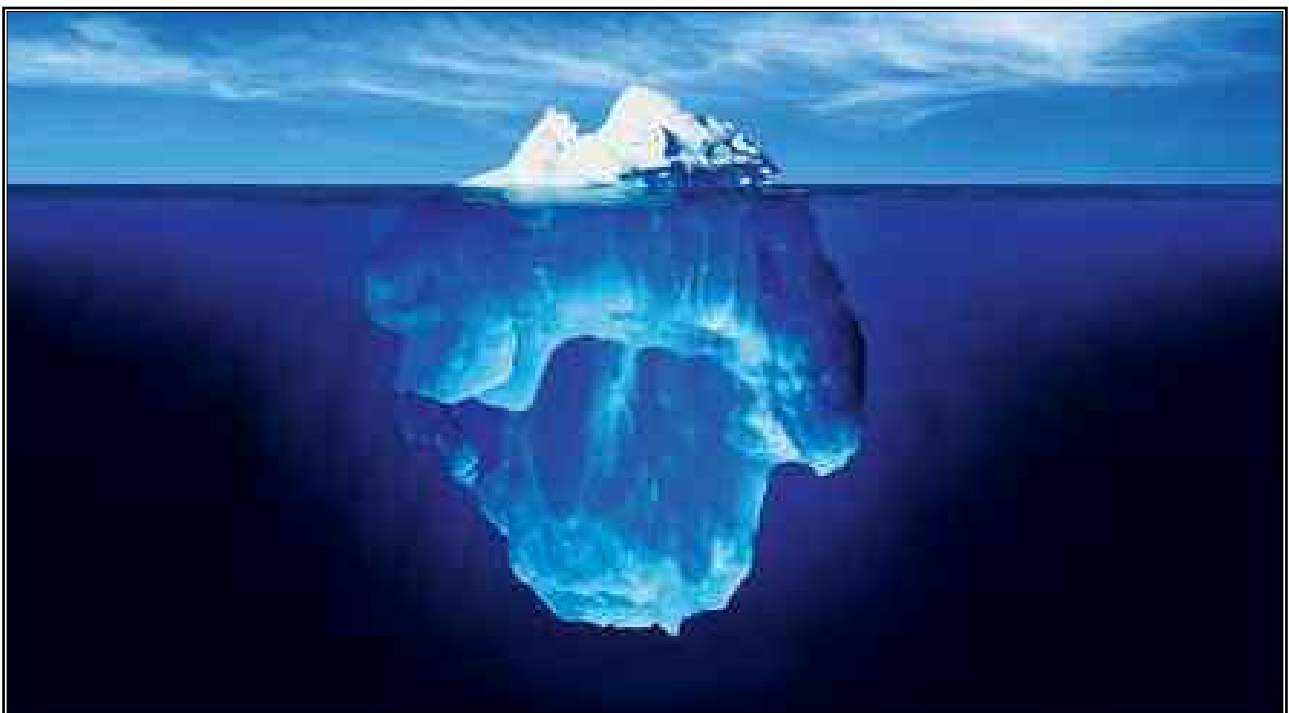
not just a part of her, the revival of spirituality, the holistic approach, the Millennium Goals, gender concerns, sustainability, microfinance, just to name a few, are distinctive signs that we stand on the threshold of a new state of consciousness and that a shift in consciousness is taking place. However, among peoples and faiths also great disturbances are taking hold, erupting wars, conflicts, totalitarisms, cultural, financial and social crises are our current diseases.

On the assumption that human inner structure arises from matter to vegetal, animal, human, and to real human (*Insan i-Kamil, Adam Kadmon, Anthropos Celesti*) we shall then reckon that each of these levels has its own corresponding state of consciousness, and that the gradual transition from one level to the next one is always marked by a crisis, or at least partakes of it. A crisis is the symptom of a change, the outcome of the burst of a given equilibrium and the thrust to gain a new balance on a different plane. This abiding and

enduring unbalance finds its *way* onward through the realm of possibilities, to rest 'temporary' on its next unavoidable achieved poise – but we should keep in sight that “the way that can be said is *not* the way”, as an old acquaintance of ours used to say quite a long ago. Ready to explore the unknown we move fast to the next phase: A dimension of consciousness devoid of space and time, where only the 'present' dwells, with its inborn pro-tension towards the next evolutionary leap, a kind of entelechy, a vibration, a motion, a dance, a ripple, a quiver, a throb (*spanda*) is perpetuating itself and its initial stir – and we are nothing but the re-told story of a moment, a while into a while. The constant transformation is in place, the original vibration rebounds on the plane of existence and gives birth, in-forms the dimensional phenomenal world. Is the 'content' of consciousness, or consciousness itself at work here? A distinction again

as a sort of “spensierata fanciullezza”. What we experience as individual growth, inner transformation or transmutation, counterparts and parallels the shift taking effect in the collective plane of consciousness, the planetary consciousness, in the *anima mundi*. No peace is possible without inner peace. The time of the prophets is definitively over, we all are prophets, and we all are brothers and sisters but unable to wholly partake of our humanhood because our 'human' consciousness still intermittently presents itself only between whiles ... meanwhile we are graciously bathing in time...

In all events we should strive to be part of the solution, not of the problem of this world, and let the highest consciousness and its content flow into the world, giving back to it what we received from its source. In other words, we should be channels to enliven and spiritualise matter, and make it realise its inherent primeval propensity. Easy to say,

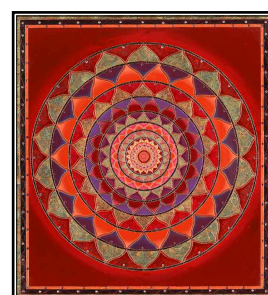


occurs: is it the content of the shape, or the shape of the content, or the content itself?

Paradigm shift, leap, change, systemic change, whatever we may call it, it seems to be a two-way process: individual–collective, and collective–individual. We think that *this* and *that* are the same, because we assume that the thinking mind is the right tool to utilise to investigate reality. Duality has its grip until we are in the bi-dimensional consciousness plane of thought. The thinking mind by its own nature is dual, binary, and as such is compelled to perceive reality in a dualistic manner: inner and outer; higher and lower; yin and yang; male and female; heaven and hell; spirit and matter; above and below, and so forth. In reality, Reality is one, undivided. The enduring experience of this undivided dimension is the further state of consciousness that humankind is already moving into, a state comparable to what in my own language will sound

hard to attain, but only by this, spirit and matter will no longer be a dichotomy in us and in the world, and will eventually re-solve and coagulate into unity. Dialogue, tolerance, and acceptance are key to this process of integral, inner-outer harmonisation.

Best to all of you, enjoy the issue. ▣



# THE EVOLUTION OF CONSCIOUSNESS

PETER RUSSELL



*Peter Russell earned a first class honours degree in Theoretical physics and Experimental psychology, and a master's degree in Computer Science at the University of Cambridge, UK. He then travelled to India to study Eastern philosophy and on his return began research into the psychology of meditation. Since then is prime focus has been the exploration and development of human consciousness, integrating Eastern and Western understanding of the mind.*

*Among the first to introduce self-development to the business world, Peter Russell's corporate programmes have been applauded by such companies as Apple, America Express, British Petroleum and IBM. He is author of many books, including The TM Technique, The Brain Book, The Creative Manager, the White Hole in Time, The Global Brain Awareness, Waking up in Time, and editor of The Upanishad. The author's website: [www.peterrussell.com/SCG/EoC.php](http://www.peterrussell.com/SCG/EoC.php).*

**B**EFORE WE CAN BEGIN TO CONSIDER THE EVOLUTION of consciousness, we have to ask when consciousness first arose. Are human beings alone conscious, or are other creatures also conscious? Is an animal such as a dog, for example, conscious?

Dogs may not be aware of many of the things we are aware of. They are not conscious of much beyond their immediate world, the world defined by the span of their senses. They know nothing of lands beyond the oceans, or the space beyond the earth. Nor can dogs be aware of much beyond the present time. They know nothing of the course of history, or where it might be headed. They are not aware of their inevitable death in the same way that we are. They do not think to themselves in words, and they probably do not reason as we do. And they do not seem to have the self-awareness that we do; they certainly do not get caught up

in concern for their own self-image, with all the strange behaviors that engenders. But this does not mean that dogs have no awareness at all.

Dogs experience the world of their senses. They see, hear, smell, and taste their world. They remember where they have

been. They recognize sounds. They may like some people or things, and dislike others. Dogs sometimes show fear, and at other times excitement. When asleep, they appear to dream, feet and toes twitching as if on the scent of some fantasy rabbit. They clearly are not just a biological mechanism, devoid of any inner experience. To suggest that they are not conscious is absurd – as absurd as suggesting that my neighbour across the street is not conscious.

Where dogs differ from us is not in their capacity for consciousness but in what they are conscious of. Dogs may not be self-aware, and may not think or reason as we do. In these respects they are less aware than we are. On the other hand, dogs can hear higher frequencies of sound than we do, and their sense of smell far surpasses our own. In terms of their sensory perception of the world around, dogs may be

considered more aware than humans.

A useful analogy for understanding the nature of consciousness is that of a painting. The picture itself corresponds to the contents of consciousness; the canvas on which it is painted corresponds to the faculty of consciousness. An infinite variety of pictures can be painted on the canvas; but whatever the pictures, they all share the fact that they are painted on a canvas. Without the canvas there would be no painting.

The pictures that are painted on the canvas of consciousness take many forms. They include our perceptions of the world around, our thoughts, our ideas, our beliefs, our values, our feelings, our emotions, our hopes, our fears, our intuitions, our dreams and fantasies — and more. But none of this would be possible if we did not in the first place possess the capacity for consciousness. Without it there would be no subjective experience of any kind.

ARE ALL CREATURES CONSCIOUS?

If dogs have the faculty of consciousness, then by the same argument so must cats, horses, deer, dolphins, whales, and

→ | THE EXPERT

“ Consciousness is the phenomenon whereby the universe’s very existence is made known. ”

ROGER PENROSE

other mammals. Why else would we require veterinarians to use anesthetics?

If mammals are conscious beings, then I see no reason to suppose birds are any different. Some parrots I have known seem as conscious as dogs. If birds have the capacity for consciousness, then it seems natural to assume that so do other vertebrates – alligators, snakes, frogs, salmon, and sharks. What they are conscious of may vary considerably. Dolphins «see» the world with sonar; snakes sense infrared radiation; sharks feel with electric senses. The pictures that are painted in their minds may vary considerably; but, however varied their experiences, they all share the faculty of consciousness.

Where do we draw the line? At vertebrates? The nervous systems of insects may not be as complex as ours, and they probably do not have as rich an experience of the world as we do. They also have very different senses, so the picture that is painted in their minds may be totally unlike ours. But I see no reason to doubt that insects have inner experiences of some kind.

How far down do we go? It seems probable to me that any organism that is sensitive in some way to its environment has a degree of interior experience. Many single-celled organisms are sensitive to physical vibration, light intensity, or heat. Who are we to say they do not have a corresponding degree of consciousness?

Would the same apply to viruses and DNA? Even to crystals and atoms? The philosopher Alfred North Whitehead argued that consciousness goes all the way down. He saw it as an intrinsic property of creation.

#### CONSCIOUSNESS AND BIOLOGICAL EVOLUTION

If all creatures are conscious in some way or other, then consciousness is not something that evolved with human beings, or with primates, mammals or any other particular degree of biological evolution. It has always existed. What emerged over the course of evolution were the various qualities and dimensions of conscious experience – the contents of consciousness.

The first simple organisms – bacteria and algae – having no senses, were aware in only the most rudimentary way: no form, no structure, just the vaguest glimmer of awareness. Their picture of the world is nothing but an extremely dim smudge of colour – virtually nothing, compared to the richness and detail of human experience.

When multicellular organisms evolved, so did this sensing capacity. Cells emerged that specialized in sensing light, vibration, pressure, or changes in chemistry. These cells formed sensory organs, and as they developed, the ability to take in information increased. Eyes are not only sensitive to light; they react differently to different frequencies, and can tell from which direction the light is coming. The faintest smudge of the bacterium's experience had begun to take on different hues and shapes. Forms had begun to emerge on the canvas of consciousness.

Nervous systems evolved, processing this data and distributing it to other parts of the organism. Before long, the flow of information required a central processing system, and with it a more integrated picture of the world appeared. As brains evolved, new features were added to consciousness. With reptiles the limbic system appeared, an area of the brain associated with emotion. Feeling had been added.

In birds and mammals the nervous system grew yet more complex, developing a cortex around it. With the cortex came other new abilities. A dog chasing a cat around a corner holds some image in its mind of the cat it can no longer see. Creatures with a cortex have memory and recognition; they can pay attention and show intention.

With primates the cortex grew into the larger, more complex neo-cortex, adding yet more features to consciousness. The most significant of these was the ability to use symbols. Not only did this ability enable simple reasoning, it also led to a new form of communication – symbolic language.

Chimpanzees and gorillas may not be able to speak as we do, but this is not because they lack something in their brains; they lack a voice. They have no larynx, or voice-box, and cannot move their tongues as freely as we can. But they can use other forms of symbolic language. When taught sign language, such as that used by the deaf, they show a remarkable ability to communicate. Coco, a gorilla in California, now has a vocabulary of more than a thousand words, and composes sentences in sign language.

#### LANGUAGE AND CONSCIOUSNESS

For one reason or another, human beings evolved slightly differently. We have a well-developed voice-box, and after the first year of life the tongue frees up, permitting the complex sounds necessary for speech. With these two seemingly small advances, everything changed.

Being able to speak allows us to share our experiences with each other. Whereas a dog learns principally from its own experience, and builds up its knowledge of the world from scratch, we can learn from each other. We can build up a body of collective knowledge and pass it on from one generation to another – the foundation of a cohesive society.

This new ability has expanded our consciousness in several ways. Our experience of space expanded as we learnt of events beyond our immediate sensory environment. And as we learnt of events that had happened before our own lives, our experience of time expanded.

As well as using speech to communicate with each other, we can also use it to communicate with ourselves, inside our own minds. We can think to ourselves in words. Of all the developments that came from language, this has probably been the most significant.

Thinking allows us to conjure up associations to past experiences. When we think of the word «tree», images of trees readily come to mind. Or if we think of a person's name, we may find ourselves remembering past experiences with that person. Other creatures may well experience associations to past experiences, but their associations are almost certainly determined by their immediate environment; what is out of sight is out of mind. Thought liberated human beings from this constraint. We can deliberately bring the past back to mind, independently of what is happening in the present.

In a similar way, thinking expanded our appreciation of the future. We can think about what might or might not happen, make plans and take decisions. A new inner freedom had been born — the freedom to choose our future and so exercise a much greater influence over our lives.

Thinking in words opened our minds to reason. We could ask questions: Why do stars move? How do our bodies



function? What is matter? A whole new dimension had been added to our consciousness – understanding. We could form hypotheses and beliefs about the world in which we found ourselves.

We could also begin to understand ourselves. We could think about our own conscious experience. We became aware not only of the many aspects and qualities of our consciousness, but also of the faculty of consciousness. We are aware that we are aware – conscious of the fact that we are conscious.

Consciousness could now reflect not only upon the nature of the world it experienced, but also on the nature of consciousness itself. Self-reflective consciousness had emerged.

#### SELF-CONSCIOUSNESS

As we reflect upon our own consciousness, it seems that there must be an experiencer – an individual self that is having these experiences, making all these decisions, and thinking all these thoughts. But what is this self? What is it really like? What does it consist of?

Questions such as these have intrigued and puzzled philosophers for centuries. Some, like the Scottish philosopher David Hume, spent much time searching within their experience for something that seemed to be the true self. But all they could find were various thoughts, sensations, images and feelings. However hard we look, we never seem to find the self itself.

Not finding an easily identifiable self at the core of our being, we look to other aspects of our lives for a sense of identity. We identify with our bodies, with how they look, how they are dressed, and how they are perceived by other people. We identify with what we do and what we have achieved; with our work, our social status, our academic qualifications, where we live and who we know. We derive a sense of who we are from what we think, our theories and beliefs, our personality and character.

There is, however, a severe drawback to such a sense of self. Being derived from what is happening in the world of experience, it is forever at the mercy of events. A person who draws a strong sense of identity from their work may, on hearing that their job is threatened, feel their sense of self is threatened. Someone else, who identifies with being fashionably dressed, may buy a new set of clothes every time the fashion changes, not because they need new clothes, but because their sense of self needs to be maintained. Or if we identify with our views and beliefs we may take a criticism of our ideas to be a criticism of our self.

Any threat to our sense of self triggers fear. Fear is of great value if our physical self is being threatened. Then we need to have our heart beat hard, our blood pressure rise, and our muscles tense. Our survival may depend on it. But this response is totally inappropriate when all that is being threatened is our psychological self.

Having our bodies repeatedly put on full alert is a principal cause of stress. We can easily end up in a permanent state of tension, opening us up to all manner of physical illnesses.



Our emotional life may suffer, leading to anxiety or depression. Our thinking and decision making can likewise deteriorate.

Fear also leads to worry. We worry about what others might be thinking of us. We worry about what we have done or not done, and about what might or might not happen to us. When we worry like this, our attention is caught up in the past or the future. It is not experiencing the present moment.

Perhaps the saddest irony of all is that this worry prevents us from finding that which we are really seeking. The goal of every person is, in the final analysis, a comfortable state of mind. Quite naturally, we want to avoid pain and suffering, and feel more at peace. But a mind that is busy worrying cannot be a mind that is at peace.

Other animals, not having language, do not think to themselves in words, and do not experience many of the worries that we do. In particular, they do not experience all the worries that come from having a vulnerable sense of self. They are probably at peace much more of the time. Human beings may have made a great leap forward in consciousness, but at our present stage of development we are no happier for it – quite the opposite.

#### TRANSCENDING LANGUAGE

There is, it would appear, a downside to language. Language is invaluable for sharing knowledge and experience – without it human culture would never have arisen. And thinking to ourselves

in words can be very useful when we need to focus our attention, analyze a situation, or make plans. But much of the remainder of our thinking is totally unnecessary.

If half my attention is taken up with the voice in my head, that half is not available for noticing other things. I don't notice what is going on around me. I don't hear the sounds of birds, the wind, or creaking trees. I don't notice my emotions, or how my body feels. I am, in effect, only half-conscious.

Just because we have the gift of being able to think in words does not mean that we have to do it all the time. Many spiritual teachings seem to have recognized this. In Buddhism, for example, students are often advised to sit with a quiet mind, experiencing «what is» without naming it in words or putting it into some category — to see a daffodil as it is, without the labels «daffodil», «flower», «yellow» or «pretty». To see it with the mind in its natural state, before language was added to our consciousness.

#### SAT CHIT ANANDA

Returning the mind to this simple pre-linguistic state of consciousness is not easy. A lifetime of conditioning makes it hard to stop thinking and let go. This is why many spiritual teachings include practices of meditation designed to quieten the voice in the head, and bring us to a state of inner stillness. In Indian philosophy, this state is called *samadhi*, «still mind».

Furthermore, it is said that when the mind is still, then one knows the real self, and the nature of this self is, according to the ancient Vedic teachings, *sat-chit-ananda*.

It is *sat* – «the truth, unchanging, eternal, being». It is always there, whatever our experience. It never changes. It is not a unique self; it has no personal qualities. It is the same for everyone. It is the one undeniable truth – the fact that we are conscious.

It is *chit* – «consciousness». It is not any particular form or mode of consciousness, but the faculty of consciousness. It is that which makes all experience possible.

And it is *ananda* – «bliss». It is the peace that passeth all understanding, that lies beyond all thought. It is the state of grace to which we long to return; from which we fell when we began to fill our minds with words.

This is the self that we have been seeking all along. The reason we have had such difficulty finding it was that we have been looking in the wrong place. We have been looking for something that could be experienced – a feeling, a sense, an idea. Yet the self cannot be an experience. It is, by definition, that which is experiencing. It is behind every experience, behind everything I see, think, and feel.

What the mystical traditions around the world seem to be saying is that the self, that sense of I-ness that we all feel, but which is so hard to pin down or define, is actually consciousness itself. The pure self is pure consciousness – the faculty of awareness common to all sentient beings.

Moreover, when we come to know this to be our true essential nature, our search for identity ends. No longer is there any need to buy things we don't really need, say things we don't really mean, or engage in any other unnecessary and inappropriate activities in order to reinforce an artificially derived sense of self. Now we discover a deeper inner security, one that is independent of circumstances and events. Here is the peace we have long been seeking. It is right here inside us, at the heart of our being. But as with the self, we have been looking for it in the wrong place – in the world around.

#### OUR EVOLUTIONARY IMPERATIVE

With the advent of human beings, the awakening of consciousness took a huge leap forward. Consciousness began becoming aware of itself. But at present this leap is only partially complete. We may be self-aware, but we have not yet discovered the true nature and potential of consciousness. In this respect our inner evolution has some way to go.

Throughout history there have been those who have evolved inwardly to higher states of consciousness. They are the saints and mystics who have realized the true nature of the self. Such people are examples of what we each have the potential to become. There is nothing special about them in terms of their biology. They are human beings, just like you and me, with similar bodies and similar nervous systems. The only difference is that they have liberated themselves from a limited, artificially derived sense of identity and discovered a greater peace and security within.

In the past the number of people who made this step was small, but the times we are living through make it imperative that many more of us now complete our inner evolutionary journey into full wakefulness.

The many crises that we see around us – global warming, desertification, holes in the ozone layer, disappearing rainforests, polluted rivers, acid rain, dying dolphins, large-scale famine, a widening gap between the «haves» and the «have nots», nuclear proliferation, over-exploitation, and a host of other dangers – all stem in one way or another from human self-centredness. Time and again we find decisions being made not according to the merits of the situation at hand, but according to the needs of the individual or special interest groups. Governments strive to hold on to power, businesses seek to maximize profit, leaders want to retain their status, and consumers around the world try to satisfy their own needs for identity and security. In the final analysis, it is our need to protect and reinforce an ever-faltering sense of self that leads us to consume more than we need, pollute the world around, abuse other peoples, and show a careless disregard for the many other species sharing our planetary home.

Even now, when we recognize that we are in great danger, we fail to take appropriate remedial action. We continue driving our cars, consuming dwindling resources, and throwing our waste into the sea because to do otherwise would inconvenience ourselves.

The global crisis now facing us is, at its root, a crisis of consciousness. The essence of any crisis, whether it be a personal crisis, a political crisis, or, as in this case, a global crisis, is that the old way of functioning is no longer working. Something new is being called for. In this case the old way that is no longer working is our mode of consciousness. The old mode is destroying the world around us, and threatening the survival of our species. The time has come to evolve into a new mode. We need to wake up to our true identity, to make the step that many saints and mystics have already made, and discover for ourselves the peace and security that lie at our core.

With the advent of human beings, evolution has ceased to be a blind affair governed by random genetic mutations. A new degree of freedom has appeared; we can think ahead and determine our own future. Our further evolution is now in our own hands – or rather, in our own minds.

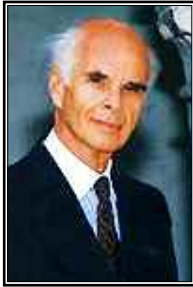
Our next step is to rise beyond the handicaps that came with the gift of language and discover who we really are. Then, free from the need to reinforce an artificially derived sense of identity, we will be able to act in accord with our true needs – and with the needs of others and the needs of our environment.

Relieved of unnecessary fears, we will be in a much better state to cope with the many changes that we will undoubtedly see over the coming years. Liberated from unnecessary self-centredness, we will be free to care for each other, to offer others the love we so much want for ourselves. And we will be in a much better position to build a new world – one that is not so driven by this halfway stage in the unfolding of self-consciousness.

Our task is to manifest this change on earth, now – both for our own sakes and for the sake of every other creature. ■

# THE CURRENT AND NEXT EVOLUTION OF HUMAN CONSCIOUSNESS

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 30 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. The author's website: [www.ervinlaszlo.it](http://www.ervinlaszlo.it).*

## THE CURRENT EVOLUTION OF CONSCIOUSNESS

**M**ORE AND MORE PEOPLE ARE BECOMING aware of the deeper potentials of their consciousness and seek to realize them in their life and experience. As people seek to transcend the classical limitations of their mind there is an intensifying search for “higher” or “altered” states of consciousness in societies both East and West.

Are these aspirations merely wishful dreams? Or is there a real possibility that we can know a wider reality beyond the reach of our bodily senses – that we not only see the world through “five slits in the tower” but can “open the roof to the sky”? The concept of the universe conveyed by

discoveries at the leading edge of the frontier sciences gives us a view that is consistent with this possibility. It suggests that our mind is not limited to our brain but, like a transceiver, can both receive and send information beyond the confines of our body. The emerging

view, which I exposed recently in a number of books (*The Interconnected Universe*, *The Connectivity Hypothesis*, *Science and the Akashic Field*, and *Science and the Reenchantment of the Cosmos*) gives us a new view of cosmos, life, and mind. It tells us that when we do not repress the corresponding intuitions, we can be “in-formed” by things as small as a particle or as large as a galaxy.

This ancient, but for modern science hitherto unacceptable view is borne out by the finding of a growing number of psychiatrists. When they place their patients in an altered state of consciousness the psychiatrists (and psychologists, psychotherapists, and healers of various kinds) find that a wide range of impressions, intuitions, and ideas flow into consciousness. This matches the experience of Apollo astronaut Edgar Mitchell while in space. Mitchell became convinced that in an altered state of consciousness humans can enter into communication with any or all parts of the uni-

verse. In altered states every cell of the body resonates with what Mitchell called “the holographically embedded information in the quantum zero-point energy field.”

In light of the theory of Akashic “A-field” we can reconstruct how this “broad-band” information reaches our mind. Physicists are agreed that the particles and atoms that arise and evolve in space and time emerge from the virtual energy sea known as the quantum vacuum. There is noteworthy evidence that particles and atoms, and the “material” entities based on them, not only originate in the vacuum, but also continually interact with it. A-field theory maintains that they read their traces into the vacuum field, and subtly but effectively interact with each other through their field-conserved traces. The A-field traces are not evanescent. They persist and in-form all things, most immediately the same kind of things that created them.

## → | DISCUSSION

“Not that the story need to be long, but it will take a little while to make it short.”

HENRY DAVID THOREAU

This holds true for our body and brain as well. All we experience in our lifetime – all our perceptions, feelings, and thought processes – have cerebral functions associated with them. These functions have wave-form equivalents, since our brain, as other things in space and time, creates information-carrying vortices. The vortices propagate in the vacuum and interfere with the wavefronts created by the bodies and brains of other people. The resulting interference patterns are a form of natural hologram. Generations after generations of humans leave holographic traces in the A-field. These individual holograms integrate in a superhologram, which is the encompassing hologram of a tribe, community, or culture. The collective holograms interface and integrate in turn with the super-superhologram of all people. This is the collective in-formation pool of humankind.

We can read the information carried by these holograms. On the principle of “like informs like,” we can read first of all the information carried by the hologram of our own brain and body. Reading out what we have read into the field is the physical basis of long-term memory. Our brain is a “transceiver”; it is not subject to the information-storing and information-retrieving limitation of an isolated operational system. We can retrieve anything and everything we have ever experienced, for we do not store this information within our brain, but in the Akashic field that surrounds our body and our brain.

Not only we ourselves, but others also can read out at least some of what we have read into the A-field. This is because the hologram of our body and brain can “conjugate” with the holograms of other people, especially people who are related to us and with whom we have an emotional bond. Aside from cases of clairvoyance and mystical or prophetic insight, the readout is not in the form of explicit words or events, but rather in the form of intuitions and sensations. The most widespread and hence familiar among these are “twin pain” and the sudden revelatory intuitions of mothers and lovers when their loved ones are hurt or undergo a traumatic experience.

In everyday life, however, access to the A-field is limited to our own long-term memory – to what we ourselves have read into it. But this does not mean that our consciousness must be limited to information coming through five slits in the tower. By entering altered states of consciousness we can open the roof to the sky – and recover our deeper ties to each other, to nature, and to the cosmos.

Our consciousness is not a permanent fixture: cultural anthropology testifies that it developed gradually in the course of millennia. In the thirty- or fifty-thousand-year history of modern man, the human body did not change significantly, but human consciousness did.

Different levels of human consciousness, with progressive evolution from the lowest to the highest, were envisaged by almost all the great spiritual traditions. For example, some Native American cultures (the Mayan, Cherokee, Tayta, Xingue, Hopi, Inca, Seneca, Inuit, and Mapuche traditions) hold that we are presently living under the Fifth Sun of consciousness and are on the verge of the Sixth Sun. The Sixth Sun will bring a new consciousness and with it a fundamental transformation of our world.

A number of thinkers attempted to define the specific steps or stages in the evolution of human consciousness. The

Indian sage Sri Aurobindo considered the emergence of super-consciousness in some individuals as the next step; in a similar vein the Swiss philosopher Jean Gebser spoke of the coming of four-dimensional integral consciousness, rising from the prior stages of archaic, magical, and mythical consciousness. The American mystic Richard Bucke portrayed cosmic consciousness as the next evolutionary stage of human consciousness, following the simple consciousness of animals and the self-consciousness of contemporary humans. Ken Wilber's six-level evolutionary process leads from physical consciousness pertaining to nonliving matter energy through biological consciousness associated with animals and mental consciousness characteristic of humans to subtle consciousness,

which is archetypal, transindividual, and intuitive. It leads in turn to causal consciousness and, in the final step, to the ultimate consciousness called Consciousness as Such. And Chris Cowan's and Don Beck's colorful spiral dynamics sees contemporary consciousness evolving from the strategic “orange” stage that is materialistic, consumerist, and success-, image-, status-, and growth-oriented; to the consensual “green” stage of egalitarianism and orientation toward feelings, authenticity, sharing, caring, and community; heading toward the ecological “yellow” stage focused on natural systems, self-organization, multiple realities, and knowledge; and culminating in the holistic “turquoise” stage of collective individualism, cosmic spirituality, and Earth changes.

Ideas such as these differ in specific detail, but they have a common thrust. Consciousness evolution is from the ego-bound to





the transpersonal form. If this is so, it is a source of great hope. Transpersonal consciousness is open to more of the information that reaches the brain than the dominant consciousness of today. This could have momentous consequences. It could produce greater empathy among people, and greater sensitivity to animals, plants, and the entire biosphere. It could create subtle contact with other parts of the cosmos.

A society hallmarked by transpersonal consciousness is not likely to be materialistic and self-centered; it is more deeply and widely in-formed. This would change the world. Under the impact of a more evolved consciousness, the system of nation-states would transform into a more inclusive and coordinated system with due respect for diversity and the right of all peoples and cultures to self-determination. Economic systems would remain diversified but not fragmented; they would combine local autonomy with global coordination and pursue goals that serve all the peoples and countries of the world, whatever their creed, level of economic development, population size, and natural resource endowment. As a result, disparities in wealth and power would be moderated and frustration and resentment would diminish, together with crime, terrorism, war, and other forms of violence. Societies would become more peaceful and sustainable, offering a fair chance of life and well-being to all their members, living and yet to be born.

People will learn to work with the A-field, and a new wave of technological innovations would see the light of day. There would be technologies for beaming active and effective “in-formation” from one place to another, instantly and without the expenditure of energy. This would bring on line quantum computation and open the way to other technological breakthroughs. Ways would be found to teleport not just bits of quanta but atoms and molecules, living cells and organs, and possibly even aspects and elements of consciousness.

Will this condition, which in today’s perspective is distinctly utopian, actually come about? This we cannot say: evolution is never fully predictable. But if humankind does not destroy its life-supporting environment and decimate its numbers, the dominant consciousness of a critical mass will evolve from the ego-bound to the transpersonal stage. This will be a quantum leap in the development of human consciousness and it will bring about a quantum leap in human civilization. ▣



*Discovery consists of seeing what everybody has seen and thinking what nobody has thought.*

ALBERT VON SZENT-GYÖRG



# THE COMING PARADIGM SHIFT IN SCIENCE

## VIEW FROM A QUANTUM PHYSICIST

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.*

*In his latest book, God is Not Dead we explore 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 and the documentary 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.*

A

PARADIGM SHIFT IN SCIENCE THAT IS TAKING US from a divisive spirituality-denying matter-based science to a science that integrates science and spirituality is now a foregone conclusion. Today, the idea of a new paradigm is based on solid theory and evidence, not mostly on fanciful imagination and wooly ideas as it once was (Ferguson, 1980). And like all creative endeavors, the paradigm shift has come with a surprise that science itself has to operate within a spiritual metaphysics.

The fancies decades ago were in favor of a holistic paradigm in which the best accommodation of spirituality that was possible is pantheism or nature based spirituality (Capra, 1975, 1982). According to holism, whole is greater than the parts. How it is greater is the emergence of novel phenomena that cannot be reduced to the sum of the parts. Life, mind, consciousness, spirituality, all were explained as such holistic emergent phenomena of matter. Hardly anyone at the time questioned the fundamental tenet of materialism – everything is made of matter.

Holism is not the only integrative track. Depth psychologists, starting with Freud and Jung, were openly positing the concept of the unconscious that presupposes an irreducible consciousness. However, even Jung (1971) who was perhaps the most revolutionary of all the new paradigm thinkers in psychology, occasionally pondered aloud if his idea of the collective unconscious does not have a genetic basis after all. There were of course Abraham Maslow (1971), Ken Wilber (2006), and other transpersonal psychologists, but they were echoing mostly ancient wisdom, not blending enough modern science to be wholly credible to scientists. The holistic paradigmers by far dominated the avant garde new age thinking: Gregory Bateson, Fritjof Capra, Eric Wansch, Francisco Varela, Humberto Maturana, John Lilly, the Nobel laureate Ilya Prigogine, Karl Pribram, David Bohm, the systems theorist Ervin Laszlo, and Roger Sperry, the Nobel biologist who made major contributions to the big hoopla surrounding the left brain-right brain asymmetry as the answer to everything, etc. The list is very distinguished and very big.

### OVERVIEW

“ He had read Shakespeare and found him weak in chemistry. ”

H. G. WELLS

Many holists such as Capra depended on systems theory for their analysis; however, the scope of this kind of analysis is limited, only generalities can be discussed. Others, Karl Pribram, David Bohm, Edgar Mitchell, among them tried the idea of hologram, both literally and metaphorically. But the hologram is an object whereas consciousness is also a subject. How does the subject-object awareness come about? This “hard question” cannot be addressed from a materialist point of view (Chalmers, 1995).

And spirituality is more than pantheism and an integrative theoretical foundation was still lacking to provide a bridge between holistic thinking within science and psychological thinking within consciousness. And such a foundation came about only when quantum physics was properly interpreted in a paradox-free way (Goswami, 1989, 1991, 1993; also see below).

Quantum physicists were not exactly quiet while all the earlier talk of a paradigm shift was going on. There was the work of David Bohm, who used the idea of quantum nonlocality to define an implicate order; him I have already mentioned in connection with the holographic paradigm. But John von Neumann (1955) was the first to interject consciousness into physics and hence all science by positing that consciousness chooses the actual event of experience from all the quantum possibilities an object represents in quantum physics. His postulate explains the observer effect—observers certainly are always found to have converted quantum possibilities into actual events of experience. In the seventies, there was Fred Alan Wolf (1970, 1984) who popularized von Neumann’s idea with the slogan – We create our own reality. Even today, the book *The Secret* and the movie by the same name are recycling Wolf’s popularization of von Neumann’s idea.

The seriousness of von Neumann’s idea can be appreciated only when we engage with the so-called quantum measurement paradox, a most disagreeable thorn on the side of materialist attempts to understand and interpret quantum physics. In the materialist model based on reductionism, elementary particles make atoms, atoms make molecules, molecules make cells, cells make brain, and brain makes consciousness. This is called the upward causation model of causality. However, since all objects are quantum possibilities according to quantum physics, in such a view, possible elementary particles make possible atoms all the way making a possible brain and possible consciousness. How can a possible consciousness coupled to possibilities of an object give us an actual event? Possibility coupled to possibility gives you only bigger possibility. So materialist-reductionist thinking about consciousness cannot explain the observer effect. This is the quantum measurement problem which is a logical paradox for materialist thinking. Hence von Neumann’s idea: since material interactions cannot change possibility into actuality, our consciousness must be nonmaterial to be able to do so.

But materialists object to von Neumann’s approach to quantum measurement because it smacks of dualism. How does consciousness, if it is an independent non-material dual object, interact with a material object? Such an interaction must require the mediation of signals carrying energy. But

energy of the physical universe itself is always constant precluding any such mediation.

The breakthrough idea is that consciousness is neither a material brain-product nor a dual object; instead, it is the ground of all being in which material objects exist as possibilities. In the event of quantum measurement, consciousness (in the form of the observer) chooses from all the offered possibilities the actuality that it experiences becoming subject-object split awareness in the process (Goswami, 1989, 1991, 1993). In other words, conscious choice is responsible for manifesting both the proverbial falling tree in the forest and the you that hears the sound of the fall. No observer, no sound, not even a tree.

Crucial to the breakthrough of this primacy-of-consciousness interpretation of quantum physics was the resolution of the paradox of Wigner’s friend – in the case when two observers are simultaneously choosing among conflicting choices, who gets to choose? The paradox was resolved by three physicists working independently – Ludwig Bass (1971), Amit Goswami (1989), and Casey Blood (1993). They all proposed nonlocality – signalless interconnectedness of consciousness – as the solution. We don’t choose with total freedom from our individual local ego consciousness, but from a nonlocal, cosmic non-ordinary consciousness. Let’s call this quantum consciousness and its choice downward causation following a terminology of the psychologist Donald Campbell.

This is a breakthrough idea on several scores. First, it is now clear that conscious choice for an objective situation is objective because consciousness, being nonlocal, is objective. This validates why quantum physics is able to predict probabilities. Second, for a single event, the scope of creativity remains. The secret behind the secret is that we must choose creatively in synchrony with quantum consciousness to manifest our intentions. In our ego, our so-called free will is seriously compromised having become a choice between conditioned alternatives: what flavor of icecream, chocolate or vanilla? that kind of choice. Third, the nonlocality of consciousness is an experimentally verifiable idea.

There were already the work of Einstein, Podolsky, and Rosen (1935) and that of John Bell with his famous theorem (Bell, 1965) that suggested that nonlocality is involved in quantum measurement and how to verify the existence of nonlocality. Following Bell’s lead, Alain Aspect and his collaborators (1982) actually verified quantum nonlocality in the laboratory in 1982. In the same year, the physician Larry Dossey began making noise about the efficacy of quantum nonlocality in healing, an idea that was verified by Randolph Byrd in 1988 (Byrd, 1988) demonstrating nonlocal consciousness and downward causation in prayer healing at a distance. Earlier, the parapsychologists Russel Targ and Harold Puthoff (1974), and Robert Jahn (1982) published convincing objective data for distant viewing, and Jahn and Dunn (1986) used quantum consciousness, albeit in a slightly vague manner, to interpret their new data.

Willis Harman coined the phrase “science within consciousness” anticipating future development in 1986. Within three years, I published my papers on quantum creativity (Goswami, 1988) and the idealist interpretation of quantum physics in which God was rediscovered in the

form of quantum consciousness (Goswami, 1989). Quantum creativity reveals another important aspect of downward causation besides nonlocality – the idea of discontinuity. Creative ideas come to us via discontinuous events of insight. This is anathema to old paradigm thinking in which all phenomena are material phenomena, since material interactions are continuous. But in the primacy-of-consciousness paradigm, the discontinuity of creativity is explained as quantum leaps similar to the jumps an

roughly the same conclusions as my book only slightly camouflaged under the banner of Whitehead's philosophy. The parapsychologists Helmuth Schmidt (1993), Dean Radin (1997), and Marilyn Schlitz made their major contributions in support of downward causation and experimenter's intention as did Stanford engineering professor William Tyler (2001).

My work inspired the neurophysiologist Jacobo Grinberg and his collaborators (Grinberg *et al*, 1994) who discovered



electron makes from one atomic orbit to another without going through the intervening space.

And last but not least, the physician Deepak Chopra (1989) independently discovered quantum consciousness and the presence of discontinuity in downward causation with his revolutionary idea of quantum healing as due to quantum leaps in consciousness. Quantum healing explains much anomalous data of spontaneous healing (O'Regan, 1997). Science within consciousness was on the way.

In 1993, I published *The Self-Aware Universe* (Goswami, 1993). In the same year, physicist Henry Stapp published the book *Mind, Matter, and Quantum Mechanics*, making

the transferred potential – transfer of physical electric potential evoked by light flashes from one brain to another at a distance without any electromagnetic connection or signals to interpret their data to signify that the nonlocal transfer is due to quantum consciousness which is indeed nonlocal. Grinberg's data was later confirmed by several experiments (Fenwick *et al*, 2001; Wackermann *et al*, 2003; Standish *et al*, 2004).

We are witnessing science's re-discovery of God and downward causation, no less. But spiritual traditions, besides downward causation, also invoke the idea of subtle non-material bodies, such as mind and a vital energy



body, even a supramental body of archetypes from which our values originate.

Besides holistic thinking, new psychology, and quantum physics, there were other developments that rapidly took place after the publication of *The Aquarian Conspiracy* (Ferguson, 1980) that suggested that something more than materialism may be on the offing. In 1981, Shel Drake's revolutionary book *A New Science of Life* came out revitalizing the once discarded notion of the vital body. Previously the vital body was the source of a mysterious life-force. Shel Drake correctly theorized that the vital body is the reservoir of nonlocal and nonphysical morphogenetic fields used for biological form building. John Searle (1980, 1994) made his rediscovery of the mind that Penrose (1994) supported with rigorous mathematics, both researchers showing that matter cannot process meaning, only mind can and does.

Further data in support of subtle bodies were also accumulating. The near death researchers made breakthroughs (Sabom, 1982; Ring, 1984) proving survival after death. Stan Grof (1992) discovered the new technique of holotropic breathing for codifying reincarnational memory which until then could be verified only by following up on children's recollections (Stevenson, 1961, 1974, 1977).

Materialists object to subtle bodies because of "dualism" – there is no mediator for the interaction of the subtle and the material. But in quantum thinking, thinking of subtle objects as quantum objects or quantum possibilities within consciousness removes dualism. Consciousness is the mediator. When consciousness chooses from material possibilities, it also chooses from one or more subtle body possibilities. In the process of simultaneous choice, the material makes a representation of the subtle (Goswami, 2000, 2001; Blood (2001).

This gave science within consciousness new power, new horizons to integrate. One is the physics of survival and reincarnation. What survives? What incarnates? The subtle bodies, of course; in truth, their conditioned quantum mathematics of probabilities (Goswami, 2001). Another application of the new science was to the subject of health and healing.

I have mentioned Chopra's idea of quantum healing before. Using the new science I interpreted quantum healing as a creative healing insight as a part of the creative process (Goswami, 2005).

Acupuncture entered America, *chi* became a popular word overnight, and soon subtle (vital) energies were being studied by the likes of Elmer Green (Green and Green, 1977; Page, 1992; Eden, 1999). Soon bridges were made between the progress in quantum modeling of consciousness and the empirical and theoretical work of avant garde medical researchers of both vital energy medicine and mind-body medicine (Goswami, 2004).

In the eighties, the organismic school of biology (those biologists who ascribe causal efficacy to the entire organism not merely to the genes) led by Brian Goodwin, Mae Wan Ho, and Peter Saunders kept reminding the scientific community of the incompleteness of neo-Darwinism in several popular books (for example, Goodwin, 1994; Ho and Saunders, 1984) on the subject were published under their instigation. The biologist Michael Behe (1996) did his pioneering work in support of intelligent design of living systems

by an intelligent designer also in the nineteen nineties. The astrophysicist Arnie Wyller (1999) suggested that consciousness plays the crucial role in evolution. And finally, in a recent book (Goswami, 2008b), a bridge is made between Darwinism and the intelligent design theory of evolution using the ideas of downward causation and subtle bodies. The crucial idea here is that the famous fossil gaps of macroevolution (also called punctuation marks, see Eldredge and Gould, 1972) are the results of quantum leaps of biological creativity.

This way of looking at evolution provided a scientific basis for earlier revolutionary ideas about our evolutionary future by such luminaries as Teilhard de Chardin (1961), Sri Aurobindo (1996), and Ken Wilber (1981).

I am giving you a flavor, not a history of how the new paradigm confirming the existence of God, downward causation, and the subtle bodies came to the forefront of scientific thinking and experimentation once again.

And now the quintessential question. If the data is there as well as the theory (both has been adequately demonstrated in the past decades as reviewed here) for a consciousness-based paradigm of science, then why isn't the bulk of the scientists (the establishment) accepting the verdict? Why isn't the quantum message getting through to the mainstream scientists?

It is easy to find superficial reasons for this disconnect. Science is a moneyed enterprise with huge financial investments and materialists are very protective of them. They do not want a piece of the pie to the new science ideas and their exploration. Many Western scientists have a general distaste about religion having grown up with the fundamentalist tendencies of popular Christianity. And so on.

But as I said this is superficial and there is no reason for any dismay. The situation with the acceptance of science within consciousness among established scientists is quite parallel to the situation with the acceptance of esoteric spirituality among the people of established religions. The acceptance is slow and there is a very deep subtle reason for it.

Popular religion has no price tag in terms of responsibility. You are born into it and you are saved anyway (if you think that only in Christianity it is "Jesus saves," believe you me, this simple-minded belief is prevalent in every pop religion). But accepting esoteric spirituality based on nonduality of you and God makes you responsible for your choices. Responsibility is impossible to take on until you are ready for it.

The same is true about science within consciousness. Scientists who accept it cannot shun responsibility. No longer can they do their science in a value-free way. No longer can they remain uncommitted to transformation while pretending scientific objectivity. To be a scientist of consciousness is to research consciousness in your personal life as well as in your professional life. This is a very big change, very big responsibility.

Slow progress of the new paradigm thinking is good. Slow acceptance means that scientists are not naïve; they see what is at issue here. The philosopher Victor Frankl said, "We must supplement the Statue of Liberty in the East Coast by the Statue of Responsibility on the West Coast." There is no hurry until we have erected such a statue of

responsibility, metaphorically of course. Meanwhile the important thing is to gain acceptance for a multicultural approach to all the life and social sciences following the lead of psychology and medicine. This is where an idea called quantum activism can help.

I have been saying aloud for some time that materialism is a wound on the body of the evolution of consciousness. Isn't it prudent to heal the wound as fast as possible?

We must heal the wound before it shows signs of malignancy. Above I was talking about the scientific acceptance of the new paradigm taking its own time. But the popular acceptance does not have to wait. Thanks to the lead time that the coming of Eastern spirituality to the West and a Western revival of esotericism has enjoyed in this holomovement of consciousness, many more lay people are ready to take responsibility than scientists. In fact, I fully expect that it is the popular acceptance that will drive scientific acceptance.

What does it mean to take responsibility? It means that you become committed to transform yourself according to the need of the evolution of consciousness using the transformative aspects of quantum physics such as discontinuity and nonlocality. When you do that you become a quantum activist. An ordinary activist tries to change the world without making any changes himself or herself; the spiritual activist tries to transform believing that the world would take care of itself. The quantum activist undertakes the journey of transformation with always the transformation of the whole in mind.

So bringing quantum activism to science right now means that if we cannot convince the materialists to give up their old paradigm, let's ourselves be supportive of the development of alternative sciences wherever that is taking place. We do not compete with one another, we cooperate. We don't divide, we integrate. Eventually, the science that integrates the most will get the nod to be the new paradigm.

In the meantime, the new paradigm must demonstrate its usefulness through the development of technology. Alternative medicine is one application whose potency is already gaining recognition. Another important application is subtle energy technology such as dowsing and the use of Kirlian photography in medical diagnosis. Other applications are emerging as spiritual economics (Goswami, 2005) and politics (McLaughlin, 1994). This is just a beginning. The coming decades will bring a flurry of useful applications of the new paradigm that will hasten its acceptance.

\* Professor Goswami will deliver this speech to the upcoming International Conference on Consciousness, Tanjore, India, 2009.

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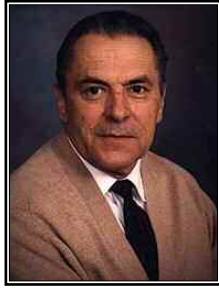
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## THE CURRENT GLOBAL CRISIS AND THE FUTURE OF HUMANITY:

### A T R A N S P E R S O N A L P E R S P E C T I V E

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 Johns Hopkins University in Baltimore, MD, and Scholar-in-Residence at the Esalen Institute in Big Sur, California, US.*

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

THE CURRENT GLOBAL CRISIS.

**H**UMANITY AS A WHOLE possesses enormous resources in the form of financial means, technological know-how, manpower, and womanpower. Modern science has developed effective means that could solve most of the urgent problems in today's world - combat the majority of diseases, eliminate hunger and poverty, reduce the amount of industrial waste, and replace destructive fossil fuels by renewable sources of clean energy. The problems that stand in the way are not of economical or technological nature; their deepest sources lie inside the human personality.

Because of them, unimaginable resources have been wasted in the absurdity of the arms race, power struggle, and pursuit of "unlimited growth." They also prevent a more appropriate distribution of wealth among individuals and nations, as well as a reorientation from purely economic and political concerns to ecological priorities that are critical for survival of life on this planet.

Diplomatic negotiations, administrative and legal measures, economic and social sanctions, military interventions, and other similar efforts have had very little success; as a matter of fact, they have often produced more problems than they solved. It is becoming increasingly clear why they had to fail. The strategies used to alleviate this crisis are rooted in the same ideology that created it in the first place. In the last analysis, the current global crisis is basically a psychospiritual crisis; it reflects the level of consciousness evolution of the human species. It is, therefore, hard to imagine that it could be resolved without a radical inner transformation of humanity on a large scale and its rise to a higher level of emotional maturity and spiritual awareness.

The task of imbuing humanity with an entirely different set of values and goals might appear too unrealistic and utopian to offer any real hope. Considering the paramount role of violence and greed in human history, the possibility of transforming modern humanity into a species of individuals capable of peaceful coexistence with their fellow men and women regardless of race, color, and religious or political conviction,

let alone with other species, certainly does not seem very plausible. We are facing the necessity to instill humanity with profound ethical values, sensitivity to the needs of others, acceptance of voluntary simplicity, and a sharp awareness of ecological imperatives. At first glance, such a task appears too fantastic even for a science-fiction movie.

However, although serious and critical, the situation might not be as hopeless as it appears. After more than half a century of intensive study of holotropic states of consciousness, I have come to the conclusion that the theoretical concepts and practical approaches developed by transpersonal psychology, a discipline that is trying to integrate spirituality with the new paradigm emerging in Western science, could help alleviate the crisis we are all facing. These observations suggest that radical psychospiritual transformation of humanity is not only possible, but is already underway. The question is only whether it can

→ | ON FOCUS

“The heart has its reasons which reason knows nothing of.”

BALISE PASCAL

be sufficiently fast and extensive to reverse the current self-destructive trend of modern humanity.

OLD PARADIGM WORLD VIEW, MYTH,  
AND VISION UNDERLYING THE GLOBAL CRISIS

The old vision driving the Western technological civilization received powerful support and justification from science based on the Newtonian-Cartesian paradigm and monistic materialism. This world view is based on the metaphysical assumption that the universe is a mechanical system that is strictly deterministic and in which matter is primary. Life, consciousness, and intelligence are seen as more or less accidental side-products of matter, essentially flukes that happened in an insignificant section of a giant universe after billions of years of evolution of inert and reactive inorganic materials.

In the old paradigm, the universe and nature have no guiding intelligence or creative blueprint. All the incredible complexity of forms revealed by various scientific disciplines from astronomy through biology to quantum-relativistic physics has been attributed to meaningless play of material particles. Particles of inorganic matter just happened to generate organic compounds and these just happened to organize themselves into cells. The entire Darwinian evolution from unicellular organisms to humans is seen as having been guided by accidental genetic mutations and natural selection. According to this world view, the principal mechanism of evolution in nature is survival of the fittest and the militant strategy of the selfish gene. This seems to explain and justify pursuit of individual interest in competition with and at the expense of others from personal life to collective economic, political, and military pursuits.

This was further reinforced by the findings of depth psychology pioneered by Sigmund Freud and his followers, which purported that all our behavior is, in the last analysis, driven by basic instincts. From this perspective, feelings of love are nothing but reaction formation to our innate hostility or desexualized interest in our parents, ethical behavior is based on fear of punishment, esthetic interest is psychological defense against powerful anal impulses, and so on. Without societal restrictions, penal institutions, and superegos created by parental prohibitions and injunctions, we would indulge in indiscriminate promiscuous sexual acting out, killing, and stealing (Freud: *Civilization and its Discontent*). Religious beliefs and spiritual interests of any kind are essentially attributed to superstition, gullibility, primitive magical thinking, primary process, obsessive-compulsive behavior resulting from suppression of anal impulses, and unresolved Oedipal or Electra complex, or result of serious psychopathology (Freud: *Totem and Taboo, Future of An Illusion*).

Our current scientific world view provides implicit or explicit support for our ethics and life strategy. In Western capitalist society, personal success at the expense of others has been glorified. It appears perfectly natural to create a better future for one's own group at the expense of others (e.g. plundering non-renewable resources of fossil fuels and turning them into pollution in pursuit of our own living standard, seeing killing of innocent civilians in other countries as "collateral damage" in the pursuit of our own

security, etc). We are unable to see and appreciate the critical importance of cooperation, synergy, and peaceful coexistence for planetary survival. We are also brainwashed into believing that our well-being is directly proportionate to and depends critically on material means – personal income and possessions, growth of the gross national product, and so on. There are additional specific problems related to the current political situation in the United States, a country which, because of its enormous economic and political power, represents the key player in the global crisis. The democratic ideals are cherished and defended primarily by American liberals. The leading philosophy of this group is humanism; this is typically linked with atheism, because religious beliefs of any kind appear to this group to be naïve and in conflict with reason and the scientific worldview. This perspective thus does not address the spiritual hunger and needs. History shows that these are important and powerful forces inherent in human nature, more powerful than sex, which Freud saw as the primary motivating force of the psyche (Andrew Weil: *The Natural Mind*). The social concerns of liberals, their philanthropic efforts, ecological awareness, and antiwar protests in their present form lack a deeper ideological basis and spiritual foundation. They can thus easily be dismissed as signs of weakness alien to capitalist mentality.

This seems to account for the widespread appeal of the fundamentalist and neocon groups, who present their ideas cloaked in religious terminology. These groups violate in many ways the basic principles of democracy, but address the spiritual needs of their followers. These followers tend to overlook that their leaders are feeding them useless religious dogmas and dangerous delusional nonsense, which only exploit their spiritual needs and do not actually satisfy them. Even in this distorted form, however, allusions to the divine are extremely powerful and can override democratic ideals and basic human decency.

Religion that should unite (*religare* = to bind together again) becomes a divisive element in the world, separating not only one creed from another ("we are Christians, you are pagans," "we are Moslems, you are Infidels," "we are Jews, you are Goyim"), but also one faction of a religion from another ("we are Catholics, you are Protestants," "we are Shiites, you are Sunnis"), in a way well-known from history. In recent years this split has taken also a specifically American form radically dividing the population, including the Christian community, into two irreconcilable camps ("we are the chosen ones who will experience 'rapture'; we will be united with Jesus, you will be left behind").

The convictions, which drive these Christian fundamentalists are based on misinterpretation of the Biblical description of the Armageddon and the Apocalypse. Their beliefs are so preposterous and fantastic that they would provide a sufficient basis for diagnosis of psychosis if they were reported by an individual psychiatric patient. Unfortunately, in contemporary United States they dominate the thinking of tens of millions of people and have found their way into the highest echelons of the government. Dangerous trends in the global situation, such as destruction of the environment, industrial pollution, political crises, and increase of violence are actually welcome by



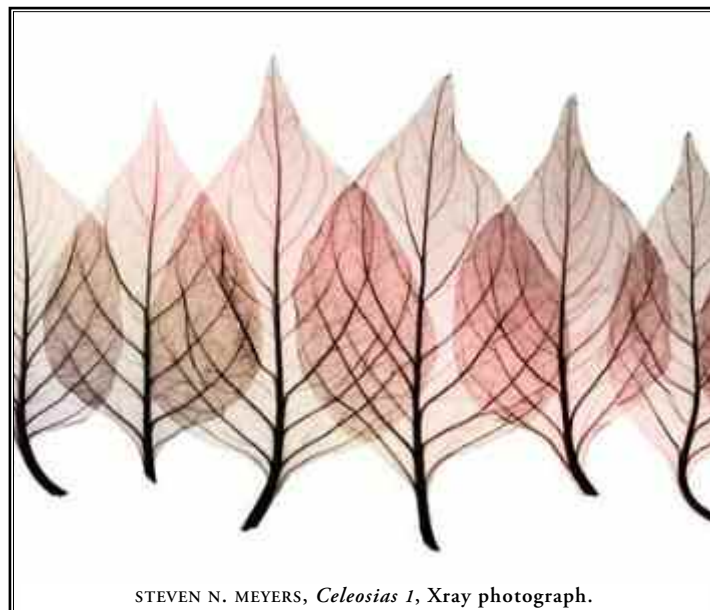
this group, because they are signs of the approaching Armageddon and herald the imminence of “rapture” that will unite them with Jesus (see the scary entries on the Internet concerning the “rapture index”). It is more than unfortunate that this insanity affects the political decisions on the highest level and has at its disposal the formidable American military power. Occasional heavy-handed and highly inappropriate references of our Commander-in-Chief to the war in the Middle East as a “crusade” feed into the equally deluded ideology of *jihad* entertained by Moslem fundamentalists and make the global situation particularly precarious.

What we need to counteract this dangerous religious propaganda that has succeeded in deluding and blinding so many Americans, is a new guiding myth, an exciting new vision, one that would be based on the best of science and also spiritually informed, one that would appeal to both rational and spiritual aspects of human nature. We need a vision that is truly democratic (not one confusing democracy with aggressive export of values and goods of Western capitalistic society) and that provides genuine satisfaction of human spiritual needs. It seems relevant to include here a passage from the Stanford lecture of the Czech president, Václav Havel, to illustrate this point:

“I am deeply convinced that (the answer) lies in what I have already tried to suggest – in that spiritual dimension that connects all cultures and in fact all humanity. If democracy is not only to survive but to expand successfully and resolve those conflicts of cultures, then, in my opinion, it must rediscover and renew its own transcendental origins. Planetary democracy does not yet exist, but our global civilization is already preparing a place for it: It is the very Earth we inhabit, linked with Heaven above us. Only in this setting can the mutuality and the commonality of the human race be newly created, with reverence and gratitude for that which transcends each of us, and all of us together. The authority of a world democratic order simply cannot be built on anything else but the revitalized authority of the universe.”

In the following text, I will try to outline such a vision on the basis of my observations made in years of research of holotropic states of consciousness. It is not a construct or result of speculation, but a worldview and life strategy that emerges spontaneously in individuals who, in the process of freeing themselves from the imprints imposed on them by the trauma of their birth and their early life, have had profound transpersonal experiences. Deep experiential work of this kind generates what we can call “spiritual intelligence.”

It is not difficult to understand that an important prerequisite for successful existence is general intelligence - the ability to learn and recall, think and reason, and adequately respond to our material environment. More recent research emphasized the importance of “emotional intelligence,” the capacity to adequately respond to our human environment and skillfully handle our interpersonal relationships (Goleman, 1996). Observations from the study of holotropic states confirm the basic tenet of perennial philosophy that the quality of our life ultimately depends on what can be called “spiritual intelligence.” Spiritual intelligence is the capacity to conduct our life in such a way that it reflects deep philosophical and metaphysical understanding of reality and of ourselves. Buddhist scriptures refer to this kind of spiritual wisdom as “*prajñā paramitā*.” Unlike the dogmas of organized churches, spiritual intelligence acquired in the process of experiential self-exploration has the power to override the scientific worldview of materialistic science. At the same time, it is equally effective as a remedy that can counteract the useless dogmas of organized religions.



STEVEN N. MEYERS, *Celestias 1*, Xray photograph.

FINDINGS OF  
MODERN  
CONSCIOUSNESS  
RESEARCH AND  
TRANSPERSONAL  
PSYCHOLOGY

Observations from psychedelic therapy, holotropic breathwork, and the work with individuals undergoing spiritual crises have shown that the human propensity to violence and greed has much deeper roots than current biological theories (naked ape, selfish gene, triune brain) and psychological theories (psychoanalysis, ego psychology, and related schools) assume. 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 recognize (Grof 2000). The finding that the roots of human violence and insatiable greed reach far deeper than academic psychiatry ever suspected and that their reservoirs in the psyche are truly enormous could 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.

I 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 were meditators and had regular spiritual practice, others had supervised psychedelic sessions or participated in various forms of experiential psychotherapy and self-exploration or shamanic rituals. I have also witnessed profound positive changes in many people who received adequate support during spontaneous episodes of spontaneous psychospiritual crises (“spiritual emergencies”).

As the content of the perinatal level of the unconscious emerged into consciousness and was integrated, these individuals underwent radical personality changes. They experienced considerable decrease of aggression and became more peaceful, comfortable with themselves, and tolerant of others. The experience of psychospiritual death and rebirth and conscious connection with positive post-natal or prenatal memories reduced their irrational drives and ambitions. It caused a shift of focus from the past and future to the present moment and enhanced their *élan vital* and *joi de vivre* – ability to enjoy and draw satisfaction from simple circumstances of life, such as everyday activities, food, love-making, nature, and music. Another important result of this process was emergence of spirituality of a universal and mystical nature that, unlike the dogmas of mainstream religions, was very authentic and convincing, because it was based on deep personal experience.

The process of spiritual opening and transformation typically deepened 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 provided 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 resulted in increasing identification with all of creation and brought the sense of wonder, love, compassion, and inner peace.

What had begun as psychological probing of the unconscious psyche conducted for therapeutic purposes automatically became a philosophical quest for the meaning of life and a journey of spiritual discovery. People who connected to the transpersonal domain of their psyche tended to develop a new appreciation for existence and reverence for all life. One of the most striking consequences of various forms of transpersonal experiences was spontaneous emergence and development of deep humanitarian and ecological concerns and need to get involved in service for some common purpose. This was based on an almost cellular awareness that

the boundaries in the universe are arbitrary and that each of us is identical with the entire web of existence.

It was suddenly clear that we can not do anything to nature without simultaneously doing it to ourselves. Differences among people appeared to be interesting and enriching rather than threatening, whether they were related to sex, race, color, language, political conviction, or religious belief. Following this transformation, these people (like many of American astronauts who have seen the earth from outer space (see Mickey Lemle’s documentary *The Other Side of the Moon*) developed 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. It is obvious that a transformation of this kind would increase our chances

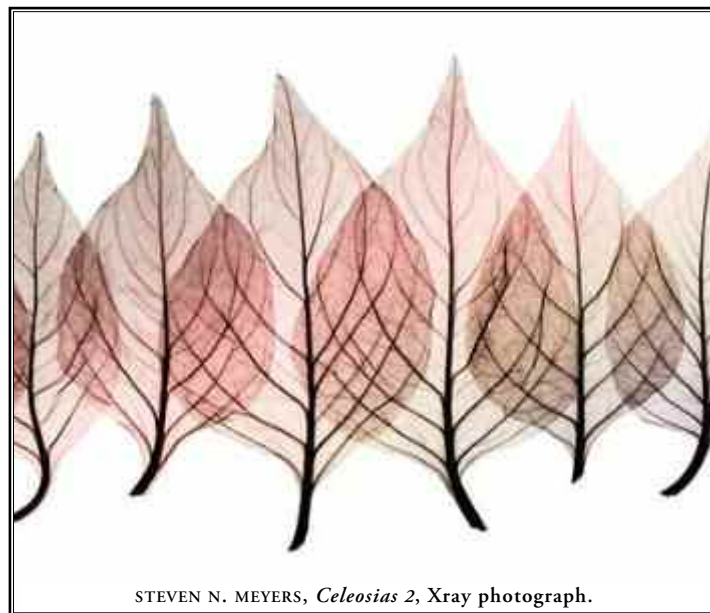
for survival if it could occur on a sufficiently large scale.

A NEW VISION OF  
REALITY  
AND A NEW MYTH  
TO LIVE BY

The image of the universe at large underlying the new vision is based on philosophical implications of quantum-relativistic physics and the anthropic principle. It acknowledges consciousness as a fundamental aspect of existence, equal or possibly supraordinated to matter, rather than its accidental product, an epiphenomenon of

matter. It sees the universe as a product of superior creative intelligence and permeated with it (*anima mundi*). Instead of the Newtonian supermachine consisting of separate building blocks (elementary particles and objects) it portrays the universe as a unified field, an organic whole in which everything is meaningfully interconnected.

New biology recognizes that evolution of species was guided by creative intelligence and that synergy and cooperation between species was at least as important guiding principle as Darwin’s survival of the fittest. The biosphere and its inhabitants cannot be understood when we take into consideration only materials that constitute them without explaining where order, forms, meaningful relations, and esthetic aspects of creation come from. Concepts similar to Sheldrake’s morphic resonance and morphogenetic fields are critical for understanding the function of DNA and the genetic code, as well as the relationship between consciousness, memory, and the brain (see Sheldrake’s *New science of Life*). Holographic thinking pioneered by David Bohm and Karl Pribram threw new light on the relationship between the part and the whole (see Bohm’s *Wholeness and the Implicate Order* and Pribram’s *Languages of the Brain*).



STEVEN N. MEYERS, *Celeosias 2*, Xray photograph.

Ervin Laszlo has provided a brilliant model of the interconnected universe in his concept of the “psi-field” or akashic field (see Laszlo’s books *The Creative Cosmos*, *The Connectivity Hypothesis*, and *Science and the Akashic Field*).

Modern consciousness research and transpersonal psychology have shown the painful limitations and misconceptions of Freudian psychoanalysis in understanding the human psyche in health and disease. It suggests urgent need of radical revision of the most fundamental assumptions of mainstream psychology and psychiatry in the following areas:

#### THE NATURE OF THE HUMAN PSYCHE AND THE DIMENSIONS OF CONSCIOUSNESS

Traditional academic psychiatry and psychology use a model that is limited to biology, postnatal biography, and the Freudian individual unconscious. To account for all the phenomena occurring in holotropic states, we must drastically revise our understanding of the dimensions of the human psyche. Besides *the postnatal biographical level*, the new expanded cartography includes two additional domains: *perinatal* (related to the trauma of birth) and *transpersonal* (comprising ancestral, racial, collective, and phylogenetic memories, karmic experiences, and archetypal dynamics).

#### THE NATURE AND ARCHITECTURE OF EMOTIONAL AND PSYCHOSOMATIC DISORDERS

To explain various disorders that do not have an organic basis (“psychogenic psychopathology”), traditional psychiatry uses a model that is limited to postnatal biographical traumas in infancy, childhood, and later life. The new understanding suggests that the roots of such disorders reach much deeper to include significant contributions from the perinatal level (trauma of birth) and from the transpersonal domains (as specified above).

#### EFFECTIVE THERAPEUTIC MECHANISMS

Traditional psychotherapy knows only therapeutic mechanisms operating on the level of the biographical material, such as remembering of forgotten events, lifting of repression, reconstruction of the past from free associations, dreams, and neurotic symptoms, reliving of traumatic memories, and analysis of transference. Holotropic research reveals many other important mechanisms of healing and personality transformation that become available when our consciousness reaches the perinatal and transpersonal levels.

#### STRATEGY OF PSYCHOTHERAPY AND SELF-EXPLORATION

The goal in traditional psychotherapies is to reach an intellectual understanding how the psyche functions, why symptoms develop, and what they mean. This understanding then becomes the basis for developing a technique that therapists can use to treat their patients. A serious problem with this strategy is the striking lack of agreement among psychologists and psychiatrists concerning the most fundamental theoretical issues and the resulting astonishing number of competing schools of psychotherapy. The work with holotropic states shows us a surprising radical alternative – mobilization of deep inner intelligence of the clients that guides the process of healing and transformation.

Western materialistic science has no place for any form of spirituality and, in fact, considers it incompatible with the scientific worldview. It sees any form of spirituality as reflecting lack of education, superstition, primitive magical thinking, or serious psychopathology. Modern consciousness research seriously challenges this misconception and shows that spirituality is a natural and legitimate dimension of the human psyche and of the universal scheme of things. However, in this context, it is important to emphasize that this statement applies to genuine spirituality based on direct personal experience and not to ideologies and dogmas of organized religions.

#### THE NATURE OF REALITY: PSYCHE, COSMOS, AND CONSCIOUSNESS

The necessary revisions discussed up to this point were related to the theory and practice of psychiatry, psychology, and psychotherapy. However, the work with holotropic states brings challenges of a much more fundamental nature. Many of the experiences and observations that occur during this work are so extraordinary that they cannot be understood in the context of the monistic materialistic approach to reality. Their conceptual impact is so far-reaching that it undermines the most basic metaphysical assumptions of Western science, particularly those regarding the nature of consciousness and its relationship to matter.

The new world view and basic life strategy that emerge spontaneously in the process of deep exploration are the following:

#### 1. ON THE INDIVIDUAL SCALE

Our deepest needs are of spiritual nature; material means can not, in and of themselves, bring us fulfillment and happiness, once we have reached satisfaction of basic biological needs (food, security, shelter, sex). In the course of biographically oriented psychotherapy, many people discover that their life has been inauthentic in certain specific sectors of interpersonal relations. For example, problems with parental authority can lead to specific patterns of difficulties with authority figures, repeated dysfunctional patterns in sexual relationships can be traced to parents as models for sexual behavior, sibling issues can color and distort future peer relationships, and so on.

When the process of experiential self-exploration reaches the perinatal level, we typically discover that our life up to that point has been largely inauthentic in its totality, not just in certain partial segments. We find out to our surprise and astonishment that our entire life strategy has been misdirected and therefore incapable of providing genuine satisfaction. The reason for this is the fact that it was primarily motivated by the fear of death and by unconscious forces associated with biological birth, which have not been adequately processed and integrated. In other words, during biological birth, we completed the process anatomically, but not emotionally.

When our field of consciousness is strongly influenced by the underlying memory of the struggle in the birth canal, it leads to a feeling of discomfort and dissatisfaction with the present situation. This discontent can focus on a large spectrum of issues – unsatisfactory physical appearance,



inadequate resources and material possessions, low social position and influence, insufficient amount of power and fame, and many others. Like the child stuck in the birth canal, we feel a strong need to get to a better situation that lies somewhere in the future.

Whatever is the reality of the present circumstances, we do not find them satisfactory. Our fantasy keeps creating images of future situations that appear more fulfilling than the present one. It seems that, until we reach these imagined goals, life will be only preparation for a better future, not yet “the real thing.” This results in a life pattern that my client have described as a “treadmill” type of existence (the image of a hamster running inside a rotating wheel) or “rat-race” way of life. The existentialists talk about “auto-projecting” into the future – always imagining oneself in some more satisfying situation in the future and attempting to create it. This strategy is a basic fallacy of human life. It is essentially a loser strategy, since it does not deliver the satisfaction that is expected from it. From this perspective, it is irrelevant whether or not it brings fruit in the material world. In Joseph Campbell’s words, it means “getting to the top of the ladder and finding out that it stands against the wrong wall.”

When the goal is not reached, the continuing dissatisfaction is attributed to the fact that we have failed to reach the corrective measures. When we succeed in reaching the goal of our aspirations, it typically does not have much influence on our basic life feelings. The continuing dissatisfaction is then blamed either on the fact that the choice of the goal was not correct or that it was not ambitious enough. The result is either substitution of the old goal with a different one or amplification of the same type of ambitions.

In any case, the failure is usually not correctly diagnosed as being an inevitable result of a fundamentally wrong life strategy, which is in principle incapable of providing satisfaction. This fallacious pattern applied on a large scale is responsible for reckless irrational pursuit of various grandiose goals that results in much suffering and many problems in the world. It can be played out on any level of importance and affluence, since it never brings true satisfaction. The only strategy that can significantly reduce this irrational drive is full conscious reliving and integration of the trauma of birth in systematic inner self-exploration and connecting to the transpersonal level of the psyche.

Modern consciousness research and experiential psychotherapy have discovered that the deepest source of our dissatisfaction and striving for perfection lies even beyond the perinatal domain. This insatiable craving that drives human life is ultimately transpersonal in nature. In Dante Alighieri’s words, «The desire for perfection is that desire which always makes every pleasure appear incomplete, for there is no joy or pleasure so great in this life that it can quench the thirst in our soul» (Dante 1990).

In the most general sense, the deepest transpersonal roots of insatiable greed can be described in terms of Ken Wilber’s concept of the Atman Project (Wilber 1980). Our true nature is divine – God, Cosmic Christ, Allah, Buddha,

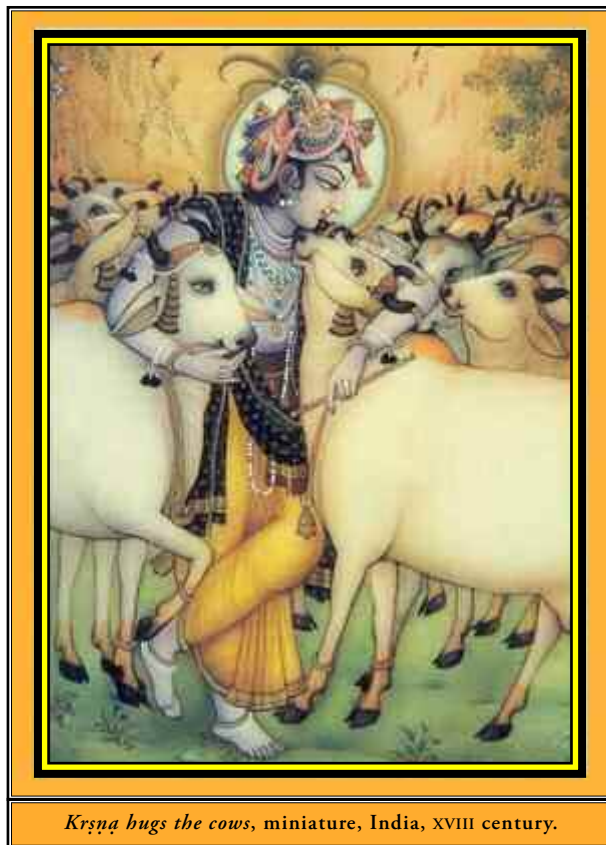
Brahman, the Tao, the Great Spirit – and although the process of creation separates and alienates us from our deep source, the awareness of this fact is never completely lost. The deepest motivating force in the psyche on all the levels of consciousness evolution is to return to the experience of our own divinity. However, the constraining conditions of the consecutive stages of development prevent an experience of full liberation in and as God.

Real transcendence requires death of the separate self, dying to the exclusive subject. Because of the fear of annihilation and because of grasping onto the ego, the individual has to settle for Atman substitutes or surrogates, which are specific for each particular stage. For the fetus and the newborn, this means the satisfaction experienced in the good

womb or on the good breast. For an infant, this is satisfaction of age-specific physiological needs. For the adult the range of possible Atman projects is large; it includes – besides food and sex – also money, fame, power, appearance, knowledge, and many others.

Because of our deep sense that our true identity is the totality of cosmic creation and the creative principle itself, substitutes of any degree and scope – the Atman Projects – will always remain unsatisfactory. Only the experience of one’s divinity in a holotropic state of consciousness can ever fulfill our deepest needs. Thus the ultimate solution for the insatiable greed is in the inner world, not in secular pursuits of any kind and scope. The Persian mystic and poet Rumi made it very clear:

*All the hopes, desires, loves, and affections that people have for different things – fathers, mothers, friends, heavens, the earth, palaces, sciences, works, food, drink – the saint knows that these are desires for God and all those things are veils. When men leave this world*



*Kṛṣṇa bugs the cows, miniature, India, XVIII century.*



and see the King without these veils, then they will know that all were veils and coverings, that the object of their desire was in reality that One Thing (Hines, 1996).

## 2. ON THE COLLECTIVE LEVEL

As biological organisms, we are embedded in the natural environment and we critically depend on clean air, clear water, and soil. Our highest priority has to be to protect these vital resources necessary for survival and health. No other concerns, such as economic profit, nationalistic ideological, religious motives should be allowed to override concerns about health and survival of the individual and the species. As Buckminster Fuller reminded us, we are “spaceship earth” with limited resources. This requires to orient ourselves on renewable energy resources that will always be available and do not pollute our environment (solar energy, zero point energy). It should not be allowed to produce materials that are not biodegradable without providing for recycling or their destruction. The escalating chemical pollution of water, air, and soil, accumulation of radioactive fallout, and floating plastic in the ocean covering an area of the size of Texas should be a serious warning.

Our unity with nature, as well as all fellow humans, dictates that we should transcend racial, sexual, national, cultural, political, and religious boundaries and divides and create a planetary civilization. Violence has to be eliminated as an acceptable means of solving conflicts. We should have world constitution that sees protection of the environment and human life as the highest imperative. Our primary focus in foreign politics should be on synergy, cooperation, and making friends, not fighting enemies (and certainly not making enemies). United States with its incredible resources of scientific know-how and economic means should become the leading force in the development of alternative energies. This goal deserves a concerted effort of the best minds in science, comparable to the Manhattan project. Development of alternative renewable sources of energy would also be a long-term radical solution of serious political problems. Its success would make us independent of the Middle Eastern oil and eliminate thus the dangerous economic dependence on the Arab world. It would also be probably the most effective way of combating terrorism of the fundamentalist Moslems and the danger of *jihad*.

It should be possible to develop programs that would help American economy and, at the same time, help underdeveloped countries, make friends, and generate respect in the world. This could involve such projects as helping to develop infrastructure in India, irrigate parts of Africa, and eliminate hunger and diseases in the world. Increasing living standard of underdeveloped countries has also been shown to be the most effective way of combating social unrest and the danger of Communism.

### LESSONS FROM HOLOTROPIC STATES FOR THE PSYCHOLOGY OF SURVIVAL

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 perinatal 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 our evening news today. 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).

We certainly see the enormous unleashing of the aggressive impulse in the many wars and revolutionary upheavals in the world, in the rising criminality, 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 behaviors are taking unprecedented forms, as manifested in the sexual freedom of adolescents, premarital sex, gay liberation, general promiscuity, common and open marriages, high divorce rate, overtly sexual books, plays and movies, sado-masochistic experimentation, 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 the fundamentalist fanatics and 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 cities. A more abstract form of the same trend is the escalating corruption and degradation of political, military, economic, and religious institutions, including the American presidency.

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. It seems that we are collectively involved in a process that parallels the psychospiritual death and rebirth, which so many people have experienced individually in holotropic states of consciousness. If we continue to act out the problematic destructive and self-destructive tendencies originating in the depth of the unconscious, we will undoubtedly destroy ourselves and seriously damage life on this planet. However, if we succeed in internalizing this process on a large enough scale, it might result in an evolutionary progress that can take us as far beyond our present condition as we now are from primates. As utopian as the possibility of such a development might seem, it might be our only real chance.

Let us now look into the future and explore how the concepts that have emerged from consciousness research, from the transpersonal field, and from the new paradigm in science could be put into action in the world. Although the past accomplishments are very impressive, the new ideas still form a disjointed mosaic rather than a complete and comprehensive new worldview. Much work has to be done in terms of accumulating more data, formulating new theories, and achieving a creative synthesis. In addition, the existing information has to reach much larger audiences before a significant impact on the world situation can be expected.

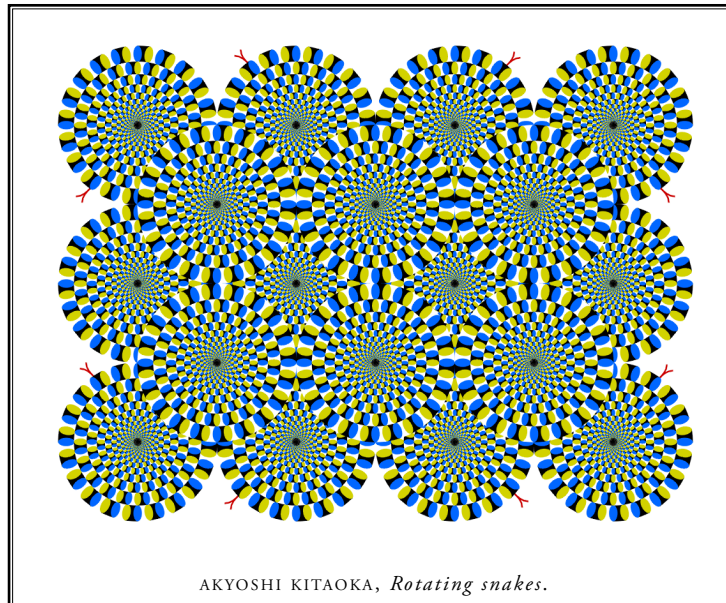
But even a radical intellectual shift to a new scientific paradigm on a large scale would not be sufficient to alleviate the global crisis and reverse the destructive course we are on. This would require a deep emotional and spiritual transformation of humanity. Using the existing evidence, it is possible to suggest certain strategies that might facilitate and support such a process. Efforts to change humanity would have to start with psychological prevention at an early age. The data from prenatal and perinatal psychology indicate that much could be achieved by changing the conditions of pregnancy, delivery, and postnatal care. This would include improving the emotional preparation of the mother during pregnancy, practicing natural childbirth, creating a psychospiritually informed birth environment, and cultivating emotionally nourishing contact between the mother and the child in the postpartum period.

Much has been written about the importance of child rearing, as well as disastrous emotional consequences of traumatic conditions in infancy and childhood. Certainly this is an area where continued education and guidance is necessary. However, to be able to apply the theoretically known principles, the parents have to reach sufficient emotional stability and maturity themselves. It is well known that emotional problems are passed like curse from generation to generation. We are facing here a very complex problem of chicken and egg.

Humanistic and transpersonal psychologies have developed effective experiential methods of self-exploration, healing, and personality transformation. Some of these come from the therapeutic traditions, others represent modern adaptations of ancient and native spiritual practices. There exist approaches with a very favorable ratio between professional helpers and clients and others that can be practiced in the context of self-help groups. Systematic work with them can lead to a spiritual opening, a move in a direction that is sorely needed on a collective scale for our species to survive. It is essential to spread the information about these possibilities and get enough people personally interested in pursuing them. An important part of these efforts would be creation of a network providing psychological assistance and support to individuals undergoing spontaneous psychospiritual transformation in spiritual emergencies. Currently, many of these people are misdiagnosed as suffering from psychosis and the potentially healing and evolutionary process of transformation is arrested by tranquilizing medication (Grof and Grof, 1989, 1991).

The comprehensive vision described above can be seen as a mosaic consisting of many pieces, each of which represents the results of research in a particular scientific discipline. Further refinement and development of its various parts thus requires interdisciplinary cooperation and communication of the theoretical concepts and their practical application with the help of various media. We seem to be 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 life on this planet. If we continue the old strategies, which in their consequences are clearly extremely self-destructive, it is unlikely that the human species will survive. However, if a sufficient number of people undergo a process of deep inner transformation, 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*.



AKYOSHI KITAOKA, *Rotating snakes*.

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# THE EXTENDED MIND: RECENT EXPERIMENTAL EVIDENCE

RUPERT SHELDRAKE



*Dr Rupert Sheldrake is a biologist and author of more than 80 technical papers and ten books, the most recent being The Sense of Being Stared at, and other Aspects of the Extended Mind. He was a Fellow of Clare College, Cambridge, and a Research Fellow of the Royal Society. He is Director of the Perrott-Warrick Project, and lives in London. He is also a Fellow of the Institute of Noetic Sciences, near San Francisco, and an Academic Director and Visiting Professor at the Graduate Institute in Connecticut. He lives in London with his wife Jill Purce and two sons.*

*The author's website: [www.sheldrake.org](http://www.sheldrake.org).*

→ | ALTERNATIVES

*“I have striven not to laugh at human actions, not to weep at them, not to hate them, but to understand them.”*

BARUCH SPINOZA

Mental fields are rooted in brains, just as magnetic fields around a magnets are rooted in the magnets themselves, or just as the fields of transmission around mobile phones are rooted in the phones and their internal electrical activities. As magnetic fields extend around magnets, and electromagnetic fields around mobile phones, so mental fields extend around brains.

Mental fields help to explain telepathy, the sense of being stared at and other widespread but unexplained abilities. Above all, mental fields underlie normal perception. They are an essential part of vision.

HOW DOES VISION WORK?

Are the images of what you see inside your brain? Or are they outside you - just where they seem to be? According to the conventional theory, there is a one-way process: light moves in, but nothing is projected out.

The inward movement of light is familiar enough. As you look at this page, reflected light moves from the page through the electromagnetic field into your eyes. The lenses of your eyes focus the light to form upside-down images

on your retinas. This light falling on your retinal rod and cone cells causes electrical changes within them, which trigger off patterned changes in the nerves of the retina. Nerve impulses move up your optic nerves and into the brain, where they give rise to complex patterns of electrical and chemical activity. So far, so good. All these processes can be, and have been, studied in great detail by neurophysiologists and other experts on vision and brain activity.

But then something very mysterious happens. You consciously experience what you are seeing, the page in front of you. You also become conscious of the printed words and their meanings. From the point of view of the standard theory, there is no reason why you should be conscious at all. Brain mechanisms ought to go on just as well without consciousness.

The standard theory of vision applies to all species of animals with image-forming eyes. It does not explain why there should be conscious vision in any animal species, or in people. There is just unconscious, computer-like data-processing by the nervous system.

**H**AVE YOU EVER FELT YOU were being watched, and turned round to find someone staring at you? Have you ever stared at someone, and found them turn around and look at you? Have you ever thought about someone for no apparent reason, and then that person rang on the telephone? Or telephoned someone who says, «I was just thinking about you!»?

The chances are that you will answer yes to most if not all of these questions. These are common experiences. But they are all phenomena that have, until recently, been ignored by science because they just don't fit in. They violate the assumption that the mind is confined to the inside of the head. Yet there is now good experimental evidence for their reality. They imply a much more extensive view of our minds.

Institutional science still takes for granted the assumption that mental activity is nothing but brain activity. Instead, I suggest that our minds extend far beyond our brains; they stretch out through fields that link us to our environment and to each other.



Then comes a further problem. When you see this page, you do not experience your image of it as being inside your brain, where it is supposed to be. Instead, you experience its image as being located about two feet in front of you. The image is outside your body.

The basic idea I am proposing is so simple that it is hard to grasp. Your image of this page is just where it seems to be, in front of your eyes, not behind your eyes. It is in your mind, but not inside your brain.

Thus vision involves both an inward movement of light, and an outward projection of images. Through mental fields our minds reach out to touch what we are looking at.

#### THE SENSE OF BEING STARED AT

Sometimes when I look at someone from behind, he or she turns and looks straight at me. And sometimes I suddenly turn around and find someone staring at me. Surveys show that more than 90% of people have had experiences such as these. The sense of being stared at should not occur if attention is all inside the head. But if it stretches out and links us to what we are looking at, then our looking could affect what we look at. Is just an illusion, or does the sense of being stared at really exist?

This question can be explored through simple experiments that cost nothing. People work in pairs. One person, the subject, sits with his or her back to the other, wearing a blind-fold. The other person, the looker, sits behind the subject, and in a random series of trials either looks at the subject's neck, or looks away and think of something else. The beginning of each trial is signalled by a mechanical clicker or bleeper. Each trial lasts about ten seconds and the subject guesses out loud «looking» or «not looking». Detailed instructions are given on my website, [www.sheldrake.org](http://www.sheldrake.org)

More than 100,000 trials have now been carried out, and the results are overwhelmingly positive and hugely significant statistically, with odds against chance of quadrillions to one. (I summarize this research in my recent book *The Sense of Being Stared At.*) The sense of being stared at even works when people are looked at through closed-circuit TV. Animals are also sensitive to being looked at by people, and people by animals. This sensitivity to looks is widespread in the animal kingdom and may well have evolved in the context of predator-prey relationships: an animal that sensed when an unseen predator was staring would stand a better chance of surviving than an animal without this sense.

#### TELEPATHY

Educated people in the West are brought up to believe that telepathy does not exist. Like other so-called psychic phenomena, it is dismissed as an illusion.

Most people who espouse these negative opinions, which I used to myself, do not do so on the basis of a close

examination of the evidence. They do so because there is a taboo against taking psychic powers seriously. This taboo dates back at least as far as the Enlightenment at the end of the eighteenth century. But this is not the place to examine its history (which I discuss in *The Sense of Being Stared At*). Rather I want to summarize some recent experiments, which suggest that telepathy not only exists, but that it is a normal part of animal communication.

I first became interested in the subject of telepathy some fifteen years ago, and started looking at evidence for telepathy in the animals we know best, namely pets. I soon came across numerous stories from owners of dogs, cats, parrots, horses and other animals that suggested that these animals seemed able to read their minds and intentions.

Through public appeals I have built up a large database of such stories, currently containing more than 4,000 case histories. These stories fall into several categories. For example, many cat owners say that their animal seem to sense when they are planning to take them to the vet, even before they

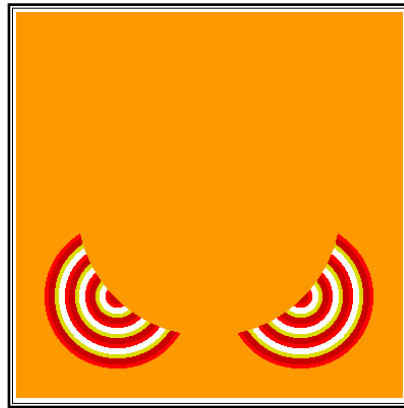
have taken out the carrying basket or given any apparent clue as to their intention. Some people say their dogs know when they are going to be taken for a walk, even when they are in a different room, out of sight or hearing, and when the person is merely thinking about taking them for a walk. Of course, no one finds this behaviour surprising if it happens at a routine time, or if the dogs see the person getting ready to go out, or hear the word «walk». They think it is telepathic because it seems to happen in the absence of such clues.

One of the commonest and most testable claims about dogs and cats is that they know when their owners are coming home, in some cases anticipating their arrival by ten minutes or more. In random household surveys in Britain and America, my colleagues and I have found that approximately 50% of dog owners and 30% of cat owners believe that their animals anticipate the arrival of a member of the household.

Through hundreds of videotaped experiments, my colleagues and I have shown that dogs react to their owners' intentions to come home even they are many miles away, even when they return at randomly-chosen times, and even when they travel in unfamiliar vehicles such as taxis. Telepathy seems the only hypothesis that can account for the facts. (For more details, see my book *Dogs that Know When their Owners Are Coming Home, And Other Unexplained Powers of Animals.*)

#### KNOWING WHO'S CALLING

In the course of my research on unexplained powers of animals, I heard of dozens of dogs and cats that seemed to anticipate telephone calls from their owners. For example, when the telephone rings in the household of a noted professor at the University of California at Berkeley, his wife knows when her husband is on the other end of the line because Whiskins, their silver tabby cat, rushes to the



AKYOSHI KITAOKA, *Okkyu.*



telephone and paws at the receiver. «Many times he succeeds in taking it off the hook and makes appreciative miaows that are clearly audible to my husband at the other end», she says. «If someone else telephones, Whiskins takes no notice.» The cat responds even when he telephones home from field trips in Africa or South America.

I soon realized that I myself had had seemingly telepathic experiences with telephone calls. I had thought of people for no apparent reason, who then called shortly afterwards. Almost everyone I talked to about it said they had had experiences like this. Through extensive surveys in several countries, my colleagues and I have found that such experiences with telephone calls are the commonest kind of apparent telepathy in the modern world.

Is this all a matter of coincidence, and selective memory, whereby people only remember when someone they were thinking about rang, and forget all the times they were wrong? Most sceptics assume that this is the case, but until recently there had never been any scientific research on the subject at all.

I have developed a simple experiment to test for telephone telepathy. Participants receive a call from one of four different callers at a prearranged time, and they themselves choose the callers, usually close friends or family members. For each test, the caller is picked at random by the experimenter by throwing a die. The participant has to say who the caller is before the caller says anything. If people were just guessing, they would be right about one time in four, or 25% of the time.

We have so far conducted more than 800 such trials, and the average success rate is 42%, very significantly above the chance level of 25%, with astronomical odds against this being a chance effect.

We have also carried out a series of trials in which two of the four callers were familiar, while the other two were strangers, whose names the participants knew, but whom they had not met. With familiar callers, the success rate was 56%, highly significant statistically. With strangers it was at the chance level, in agreement with the observation that telepathy typically takes place between people who share emotional or social bonds.

In addition, we have found that these effects do not fall off with distance. Some of our participants were from Australia or New Zealand, and did just as well when people called them from the other side of the world as with people in the same city in Britain.

#### EXTENDED MINDS

Laboratory studies by parapsychologists have already provided significant statistical evidence for telepathy (well reviewed by Dean Radin in his book *The Conscious Universe*, Harper, San Francisco, 1997). But most laboratory research has given rather weak effects, probably because most participants and «senders» were strangers to each other, and telepathy normally depends on social bonds.

The results of telephone telepathy experiments give much stronger and more repeatable effects because they involve people who know each other well. I have also found that there are striking telepathic links between nursing mothers

and their babies. Likewise, the telepathic reactions of pets to their owners depend on strong social bonds.

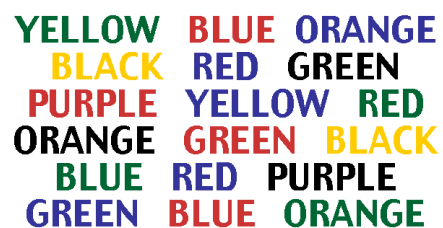
I suggest that these bonds are aspects of the fields that link together members of social groups (which I call morphic fields) and which act as channels for the transfer of information between separated members of the group. Telepathy literally means «distant feeling», and typically involves the communication of needs, intentions and distress. Sometimes the telepathic reactions are experienced as feelings, sometimes as visions or the hearing of voices, and sometimes in dreams. Many people and pets have reacted when people they are bonded to have had an accident, or are dying, even if this is happening many miles away.

There is an analogy for this process in quantum physics: if two particles have been part of the same quantum system and are separated in space, they retain a mysterious connectedness. When Einstein first realized this implication of quantum theory, he thought quantum theory must be wrong because it implied what he called a «spooky action at a distance». Experiments have shown that quantum theory is right and Einstein wrong. A change in one separated part of a system can affect another instantaneously. This phenomenon is known as quantum non-locality or non-separability.

Telepathy, like the sense of being stared at, is only paranormal if we define as «normal» the theory that the mind is confined to the brain. But if our minds reach out beyond our brains, just as they seem to, and connect with other minds, just as they seem to, then phenomena like telepathy and the sense of being stared at seem normal. They are not spooky and weird, on the margins of abnormal human psychology, but are part of our biological nature.

Of course, I am not saying that the brain is irrelevant to our understanding of the mind. It is very relevant, and recent advances in brain research have much to tell us. Our minds are centred in our bodies, and in our brains in particular. However, that they are not *confined* to our brains, but extend beyond them. This extension occurs through the fields of the mind, or mental fields, which exist both within and beyond our brains.

The idea of the extended mind makes better sense of our experience than the mind-in-the-brain theory. Above all, it liberates us. We are no longer imprisoned within the narrow compass of our skulls, our minds separated and isolated from each other. We are no longer alienated from our bodies, from our environment and from other people. We are interconnected. ▣



|        |        |        |
|--------|--------|--------|
| YELLOW | BLUE   | ORANGE |
| BLACK  | RED    | GREEN  |
| PURPLE | YELLOW | RED    |
| ORANGE | GREEN  | BLACK  |
| BLUE   | RED    | PURPLE |
| GREEN  | BLUE   | ORANGE |

# TRANSPERSONAL PSYCHOLOGY

## A SCIENCE OF SPIRITUALITY

CHARLES TART



*Dr Charles T. Tart pioneered the field of consciousness studies decades ago, with his classic best-selling anthology *Altered States of Consciousness*, in print for more than twenty years and considered as one of the one hundred most influential psychology books of the twentieth century. He initiated several important lines of research in parapsychology, including teaching reliable ESP functioning and the first modern laboratory studies of out-of-body experiences. *Altered States of Consciousness* (1969) and *Transpersonal Psychologies* (1975), became widely used texts that were instrumental in allowing these areas to become part of modern psychology.*

*Tart studied Electrical engineering at the Massachusetts Institute of Technology before electing to become a psychologist. He received his doctoral degree in psychology from the University of North Carolina at Chapel Hill in 1963, and then received postdoctoral training in hypnosis research with Professor Ernest R. Hilgard at Stanford University. He is currently a Core Faculty Member at the Institute of Transpersonal Psychology, and a Senior Research Fellow of the Institute of Noetic Sciences, as well as Professor Emeritus of Psychology at the Davis campus of the University of California, where he served for 28 years. He was the first holder of the Bigelow Chair of Consciousness Studies at the University of Nevada in Las Vegas and has served as a Visiting Professor in East-West Psychology at the California Institute of Integral Studies, as an Instructor in Psychiatry at the School of Medicine of the University of Virginia, and a consultant on government funded parapsychological research at the Stanford Research Institute (now known as SRI International).*

*As well as a laboratory researcher, Professor Tart has been a student of the Japanese martial art of Aikido (in which he holds a black belt), of meditation, of Gurdjieff's work, of Buddhism, and of other psychological and spiritual growth disciplines. His primary goal is to build bridges between the scientific and spiritual communities and to help bring about a refinement and integration of Western and Eastern approaches for knowing the world and for personal and social growth. Home page & archives: [www.paradigm-sys.com/cttart/](http://www.paradigm-sys.com/cttart/).*

**I**N A CAREER OF MORE THAN FIFTY YEARS, MY WORK HAS constantly centered around questions of the ultimate nature of human consciousness. I came from an extensive technical background, including working my way through college as a Radio

Engineer, and am a great admirer of studies of brain functioning, this having been one of my first areas of research. I am a very practical person, though, and, while as subject to intoxication with ideas as any of us, try to keep my research and thinking grounded in data, in observables. This has resulted in my becoming a «pragmatic dualist» with respect to the nature of consciousness. The brain and nervous system are essential and vitally important to consciousness as we ordinarily know it, but there is a «mind» component which seems, based on scientific observations, to be of a different nature, and to require us to develop new methods of study to fathom its nature and lawful functioning. Thus the dualism, an acknowledgement that some aspects of mind should be investigated in their own right rather than ignored because of a blind faith that they will be explained (away) by a

purely materialistic understanding of brain functioning. The pragmatism comes from the fact that I am only interested in dualistic perspectives which result in phenomena we can observe and apply, not in completely abstract, uncheckable ideas. The one disadvantage of being a pragmatic dualist is that I don't get to rest in any intellectual and emotional faith that I know the «truth,» for my understanding is always no more than my best assessment of what is known at any time – and is always potentially subject to change if important new data are observed...

The result of half a century of research on consciousness, roaming through psychophysiology, parapsychology, altered states, and other areas is my new book, *The End of Materialism: How Evidence of the Paranormal is Bringing Science and Spirit Together*, to be published in March of 2009 by New Harbinger publications of Oakland, California. The underlying theme of the book is that dogmatic materialism, in the form of scientism, has psychologically injured many people by denying any possible reality to

→ | SPOTLIGHT

“If one  
does not know  
to which port  
one is sailing,  
no wind is  
favourable.”

SENECA

their spiritual experiences and impulses, but properly applied, essential science has found a lot of evidence that humans sometimes show capacities, like telepathy, that are like what we would expect from creatures with a real spiritual aspect, and which do not fit into a reductive materialism. Thus it is reasonable to be *both* scientifically *and* spiritually oriented. One of the final sections of that book directly addresses the issues of this newsletter, suggesting directions that transpersonal psychology may develop in to start giving us a science of the spiritual. Details behind some of the ideas may be found in the book.

Although it opens into a far too huge and too important area than I can deal with here, and goes way beyond the fundamental essential science data that gives a basic reality to the spiritual, I want to give a few hints about the directions an essential science of spirituality could go in.

Readers may reasonably think of me as a parapsychologist or as a psychologist with special interest in parapsychology, but when I'm asked, I usually describe myself as a *transpersonal psychologist*, a field I had the privilege of helping to launch with my *Transpersonal Psychologies* book in 1975<sup>1</sup>. Transpersonal psychologist is a larger, more inclusive identity for me to work with than psychologist or parapsychologist. What is this field, then?

Transpersonal Psychology is a quite new branch of psychology – thirty-five or forty years or so old, depending just how you count – that will, in the long run, apply the findings of parapsychology, as well as those of other sciences to our spiritual nature, and give us both a clearer understanding of that nature and develop more effective practices for realizing it. Psychologist Abraham Maslow was the primary founder of the field, beginning with his insistence that psychology should not look only at the worst in human behavior, psychopathology, but at the best, the functioning of exceptionally mature people<sup>2</sup>. The field concerns itself with ultimate questions about human existence.

*Transpersonal Psychology is concerned with expanding the field of psychology to include the study of optimal psychological health and well-being. It recognizes the potential for experiencing a broad range of states of consciousness in some of which identity may extend beyond the usual limits of the ego and personality*<sup>3</sup>.

The applied side of Transpersonal Psychology, transpersonal psychotherapy, is similarly defined by psychiatrist Walsh and psychologist Vaughan as follows:

*Transpersonal psychotherapy includes traditional areas and concerns, adding to these an interest in facilitating growth and awareness beyond traditionally recognized limits of health. The importance of*

*modifying consciousness and the validity of transcendental experience and identity is affirmed.*

Transpersonal, transcendent *experiences*, like those of Dr. Richard M. Bucke<sup>4</sup> or Dr. Allan Smith<sup>5</sup> are the basis for this new field, rather than philosophical or religious convictions. While philosophical, religious, or ethical beliefs, for example, might argue that we ought to treat each other as if we were interdependent, with our individual wellbeing intimately connected to the welfare of all, Transpersonal Psychology would emphasize the fact that sometimes people have profound experiences, usually in altered states of consciousness (ASCs), where they deeply *experience* being one with other, sometimes all other, living beings. Regardless of how we retrospectively interpret or theorize about such experiences, they are not abstract, merely “mental” ideas, but often feel «realer than real,» and so can profoundly change people's orientation and behavior. Just as it makes no sense to hurt yourself, it then makes no sense to hurt others, and perfect sense to help and cherish them.

Transpersonal Psychology is not a religion, a theology or a philosophy. It's distinguished from such fields by its desire to base itself in empirical study, essential science, and by the incorpora-

tion of modern psychological and neurophysiological knowledge, rather than having a dogmatic *a priori* belief system that experience is forced to fit into. There are no beliefs or doctrines that must be accepted, only an openness to studying transpersonal and psychic experiences as if they might be about important realities, rather than dismissing them *a priori* as scientific materialism does. If a person reports interior conversations with a benevolent spirit, for example, let's find out more about the nature of that experience and what consequences it has for the experimenter's life, and perhaps wonder if there will someday be a way to prove or disprove the independent existence of that spirit, rather than automatically declaring that person crazy and giving them medications to make the experience go away. If our investigations of a particular person show the experience to probably be largely or wholly delusory, and it's having bad effects on the experimenter's life, then we give them conventional psychological or psychiatric treatment, but that course of action is not an automatic, prejudicial action.

The late Anthony Sutich, founder and editor of the *Journal of Transpersonal Psychology*, listed topics of central empirical interest in Transpersonal Psychology as including: individual and species-wide meta-needs, ultimate values, unitive consciousness, peak experiences, being-values, ecstasy, mystical experience, awe, being, self-actualization, essence, bliss, wonder, ultimate meaning, transcendence of the self, spirit,



oneness, cosmic awareness, individual and species-wide synergy, maximal interpersonal encounter, sacralization of everyday life, transcendental phenomena, cosmic self-humor and playfulness, maximal sensory awareness, responsiveness and expression.

When I read this list, my reaction is usually Phew! Wonderful! Too much! Crazy! Hmmm, how would we study this or that....

Here is a more formal and coherent definition of the field that I, with help in refinement from my colleagues at the Institute of Transpersonal Psychology, created in 1995:

*Transpersonal psychology is a fundamental area of research, scholarship and application based on people's experiences of temporarily transcending our usual identification with our limited biological, historical, cultural and personal self and, at the deepest and most profound levels of experience possible, recognizing/being «something» of vast intelligence and compassion that encompasses/is the entire universe.*

*From this perspective our ordinary, «normal» biological, historical, cultural and personal self is seen as an important, but quite partial (and often pathologically distorted) manifestation or expression of this much greater «something» that is our deeper origin and destination.*

*We are forced to use imprecise terms like «something» because ordinary language, as a partial manifestation of our ordinary self, which is itself a partial manifestation of our deeper transpersonal «self;» is of only partial use in our research and practice in transpersonal psychology, and needs to be supplemented with other expressive and communicative modalities.*

*Transpersonal experiences generally have a profoundly transforming effect on the lives of those who experience them, both inspiring those experiencers with an understanding of great love, compassion and non-ordinary kinds of intelligence, and also making them more aware of the distorting and pathological limitations of their ordinary selves that must be worked with and transformed for full psychological and spiritual maturity.*

*Because people ordinarily identify primarily with the personal, which tends to separate us, rather than with the transpersonal, which experientially impresses us with our fundamental unity and oneness with each other and all life, intelligent knowledge of and/or contact with the transpersonal can thus be of great potential value in solving the problems of a world divided against itself.*

*Conventional scholarly disciplines and activities are thus subsets of the general transpersonal perspective, important and*

*useful in themselves, but limited. Transpersonal psychology, as both an area of scholarly and scientific study and as an area of therapeutically applied discipline, is one of these subsets, focused on the psychological factors that either facilitate or inhibit contact with and understanding of the transpersonal and the effects of transpersonal experiences on the rest of life. Transpersonal psychology draws knowledge and practices from mainstream psychology, anthropology, history, sociology and other disciplines when helpful and needed, and tries to understand them from the more inclusive transpersonal perspective.*

As a field of work, Transpersonal Psychology is still quite small and in its infancy, and much of our knowledge base

is more hint and intimation, mixed with generous amounts of what we will probably someday see as only partial truths or mistakes, than highly factual data. Similarly, transpersonally oriented therapy is more art than science at this time. Since some of the deepest and most enduring human experiences and values are treated in this area of psychology,

however, its extensive development is vital to a full understanding of human life.

An excellent internet guide to transpersonal psychology can be found at <http://atpweb.org/transpersonalinternet.asp>

Since taking early retirement from the University of California in 1994, I have had the privilege of working at the foremost – and, unfortunately, the only one in its class – institution for promoting Transpersonal Psychology, the Institute of Transpersonal Psychology (ITP), in Palo Alto, California. Founded by psychologist and high-ranking Aikido teacher Robert Frager in 1975 and co-founding psychologist Jim Fadiman, this accredited graduate school awards masters and doctoral degrees in Transpersonal Psychology, in both residential and distance-learning programs.

Unlike conventional graduate schools, which train on an almost exclusively intellectual level, ITP also educates its students' emotional, spiritual, physical, social/relational and creative sides. Residential doctoral students, as just one example, take courses in the martial art of Aikido, learning to be calm and peaceful, present and resourceful under the stress of being physically attacked, while effectively, but non-aggressively, defending themselves. I studied Aikido for many years before joining the ITP faculty, and personally know how useful it can be in training what Gurdjieff called the "intelligence of the body" (see my *Waking Up*<sup>6</sup> book,





for example), and promoting a mindfulness and caring for others in real life and under stress that is slow to develop from classical sitting meditation procedures.

Those of you who've been through conventional graduate training, but have worked on developing your potentials afterwards, will realize how unique the ITP program is. My own graduate school training was, as is "normal," strictly intellectual. Fortunately it didn't completely crush my emotional, spiritual, physical, social/relational and creative sides, but I had to get basic education in them through my own efforts, often misdirected, for decades afterwards – and still don't feel very educated in these areas.

Besides training doctoral students, ITP produces many knowledge contributions to the field of Transpersonal Psychology through the research projects students carry out for their dissertations, as well as research by the faculty. To give some examples of how empirical, scholarly and scientific research can help us learn more about our spiritual side, here are titles of a couple of dozen ITP dissertations. A fuller listing, in alphabetical order by author, is available at <http://www.itp.edu/academics/phddissertations.cfm>.

I am proud to have served on the dissertation committees of some of these students!

Guy Albert (2004), *Exploring self-transformation through the spiritually positive resolution of mental health crises*.

Joan Andras (1993), *A phenomenological investigation of: the decision-process of a woman trusting herself in making a spiritual commitment that is contrary to the wishes of a significant person or persons*.

Kathleen Wise Barrett (1996), *A phenomenological study of channeling: the experience of transmitting information from a source perceived as paranormal*.

Chayim Douglas Barton (1990), *Jungian psychology and the Mahamudra in Vajrayana Buddhism*.

Harley Michael Bennett (2000), *Four dimensions of experiencing Sat-Guru Adi Da's spiritual Heart-Transmission (Hridaya-Saktipata): phenomenological, lasting-effects, setting (internal and external), and personality set*.

Irene Ann Blinston (2005), *When children witness the sacred: spiritual and psychological impacts, lifelong aftereffects, and disclosure aspects of religious apparitional encounters*.

Tracy B. Boynton (2000), *The effects of EEG biofeedback on hypnagogia, creativity, and well-being*.

Emma Bragdon (1987), *A sourcebook for helping people in spiritual emergency*.

Gilles Brouillette (1997), *Reported effects of Holotropic Breathwork: an integrative technique for healing and personal change*.

Jennifer Clements (1992), *An investigation of the modern day vision quest as a transformative spiritual experience*.

Margaret Ann Cochran (2004), *The impact of recorded encounters with a ghost or haunting: an examination of 12 experiences*.

Douglas E. Dandurand (2001), *Implications of mandated celibacy for the psychospiritual development of Roman Catholic clergy: a qualitative inquiry*.

Tracy Deliman (1989), *Eastern religion for Western people: a phenomenological inquiry into the experience of Tibetan Buddhist practices in the lives of six western people*.

Jay P. Dufrechou (2002), *Coming home to nature through the body: an intuitive inquiry into experiences of grief, weeping or other deep emotions in response to nature*.

Vipassana Christine Esbjorn (2003), *Spirited flesh: an intuitive inquiry exploring the body in contemporary female mystics*.

Carolyn Frances Ethridge (1996), *Using past-life regression as a*

*tool to reduce feelings of hopelessness in individuals who experience suicidal ideation*.

Frederick Christian Fehrer (2002), *The awareness response: a transpersonal approach to reducing maladaptive emotional reactivity*.

Elizabeth Ferguson (2001), *Mutual hypnosis: an exploratory multiple-case study*.

Jan Fisher (1996), *Dance as a spiritual practice: a phenomenological and feminist investigation of the experience of being-movement*.

Julie Forbes (1999), *Business people who meditate: the impact of the practice on their experience in the workplace*.

Vocata Sue George (1986), *The history of the Goddess and the transpersonal significance of her decline and re-emergence in the West*.

Caryl Reimer Gopfert (1999), *Student experiences of betrayal in the Zen Buddhist teacher/student relationship*.

Bonnie Lynne Greenwell (1988), *Kundalini: a study of eastern and western perspectives and experiences and their implications for transpersonal psychotherapists*.

Brian Heery (2003), *Awakening spirit in the body: a heuristic exploration of peak or mystical experiences in the practice of aikido*.

Fascinating, isn't it? These dissertations are examples of how we can start increasing our useful knowledge and understanding of spiritual aspects of our nature if we start to apply intelligence and essential science to questions about our psychic and spiritual nature.

Most of our ITP graduates, though, will go on into service positions as therapists and spiritual guidance counselors, rather than researchers continuing to expand our knowledge. It's wonderful that they will serve individuals and communities like that, but sad that the infrastructure, the jobs and funding, aren't there yet to support them as researchers.

ITP's Core Faculty have longer-term research programs and, in spite of support resources that are still way too small compared to the enormity and importance of the questions to be answered, have produced hundreds of journal publications and many books. To give you some idea of faculty interests, here are the titles of transpersonally oriented books, not counting my own, published by ITP faculty.

*Celtic Oracles: A New System for Spiritual Growth*

*Changes of Mind: A Holonomic Theory of the Evolution of Consciousness*

*Changing Images of Man*

*Distant Mental Influence: Its Contributions to Science, Healing, and Human Interactions*

*Forgive for Good: A Proven Prescription for Health and Healing*

*Foundations of the Buddha's Teachings-Abhidhamma and its Causation, Correlation and Liberation*

*Health for the Whole Person*

*Heart, Self and Soul: The Sufi Psychology of Growth, Balance, and Wholeness*,

*Love is the Wine, an Introduction to Sufism*

*Personality and Personal Growth*

*Stress Free for Good : 10 Scientifically Proven Life Skills for Health and Happiness*

*Sufi Akbar-The First Mogul Interfaith King*

*Transcendent Sex: When Lovemaking Opens the Veil*

*Transpersonal Research Methods for the Social Sciences: Honoring Human Experience*

*Who am I? Personality Typologies for Self Discovery*

*With the Tongues of Men and Angels: A Study of Channeling*

I can't emphasize enough that getting better answers to questions about who we really are, our spiritual nature, is vital if our civilization is to survive and grow. Unchecked

materialistic greed, combined with institutionalized religious intolerance and ignorance, are ruining our planet. But if, as scientific materialism tells us, we are nothing but chemical accidents whose existence has no inherent meaning anyway, why not try to get all you can right now? Who cares about other people or future generations? We'll all be long dead by then.

Telling us we *should* treat each other like one big human family is nice, but doesn't carry much weight when pitted against human greed, resource shortage, scientific materialism and the like. But when someone like Richard M. Bucke or Allan Smith has a deep, transpersonal experience of Cosmic Consciousness, and our essential science studies of parapsychology tell us that this could be about *realities*, not just pleasing fantasies... well, things change drastically. I know that saving the world is a huge and complex problem, but my personal conviction is that developing a large-scale, well-supported Transpersonal Psychology, sorting the true(er) from the false(er) in spirituality and religion, and learning how to help people have direct experiences of our essential spiritual nature and relatedness, is one of the most important parts of saving it.

But, as I mentioned earlier, Transpersonal Psychology is still a new and tiny field of psychology, and ITP, the leading institution, in spite of an enviable record of faculty and student productivity, is limited in its resources to promote research.

Earlier I asked, has there been any progress in spirituality? You could break that into more specific questions like:

«Are more people seriously embarking on a spiritual growth path?»

«Has such training become more effective, such that a higher proportion of people grow from the training?»

«Are we producing more wise, compassionate individuals who are of service to others?»

«Are we reducing the number of dropouts and people who are hurt by outmoded or unsuitable (for them) spiritual training practices?»

To get more positive answers to any of these kinds of questions, we need the research, both theoretical and applied, that will create progress in spirituality. If we had major support for Transpersonal Psychology, I can imagine enormous leaps forward in the depth and effectiveness of spiritual practice....

I will devote the remainder of my career to advancing Transpersonal Psychology and, as its foremost practical expression, ITP. That is part of being, and being proud of being, *both* a spiritual seeker and a scientist.

<sup>1</sup> CHARLES TART, *Transpersonal Psychologies* (New York: Harper & Row, 1975).

<sup>2</sup> ABRAHAM. H. MASLOW, *Religions, Values, and Peak-Experience* (Columbus, Ohio: Ohio State University Press 1964).

<sup>3</sup> FRANCES VAUGHAN & ROGER WALSH, *Beyond ego: Transpersonal dimensions in psychology* (Los Angeles: Tarcher 1980,).

<sup>4</sup> RICHARD M. BUCKE. *Cosmic Consciousness: A Study in the Evolution of the Human Mind* (New Hyde Park, New York: University Books Inc. 1961).

<sup>5</sup> ALLAN SMITH, *Cosmic consciousness experience and psychedelic experiences: A first person comparison*, in *Journal of Consciousness Studies*, 5 (1998), 97-107.

<sup>6</sup> CHARLES TART, *Waking Up: Overcoming the Obstacles to Human Potential* (Boston: New Science Library, 1986 [currently in print through [www.iuniverse.com](http://www.iuniverse.com)]).



THE GRADUAL BLOOMING PROCESS  
OF CONSCIOUSNESS

TORU SATO



Toru Sato was raised primarily in Japan, Austria, and Germany, received his MA and PhD (Psychology) in Canada and currently is professor of Psychology of Personality at Shippensburg University in Pennsylvania, US. He has a passion for studying and teaching Psychology, feels great joy from reading about the study of consciousness and the cyclical/rhythmic nature of life. As a child he grew up swimming, playing tennis, soccer, etc. It is unclear if he has grown out of that developmental phase since he still enjoys those activities quite a bit. His love for all types of music was also apparent from an early age. There were days he would wake up before dawn just to play his favourite tunes over and over on his parents' record player...

Though fortunate in many ways, Yoshiko, his spouse, is his greatest blessing. She is the sweetest person who can also paint, draw, and cook like no other. He currently enjoys a peaceful life with many many wonderful people in the beautiful state of Pennsylvania, US.

He is the author of *The Ever-Transcending Spirit: The Psychology of Human Relationships, Consciousness, and Development* (iUniverse, 2003) and *Rhythm, Relationships, and Transcendence* (2007).

Correspondence to the author should be addressed to [tosato@ship.edu](mailto:tosato@ship.edu)

JUST AS A ROSE BUD HAS A NATURAL TENDENCY TO slowly bloom into a beautiful flower, we all have a natural motivation to psychologically develop. Humanistic psychologist, Carl Rogers for example, discussed how all humans are born with an actualizing tendency, a natural motivation to maintain and enhance not only one's own life but the lives of others as well<sup>1</sup>. Analytic psychologist, Carl Jung (1958) elaborated on a similar human tendency that he referred to as self-realization<sup>2</sup>. Both of these theorists claim that there is an inner force that drives us to grow psychologically and develop into human

beings that are increasingly mature. Abraham Maslow, another psychologist in the humanistic tradition, also claimed that we have a natural tendency to develop<sup>3</sup>. He called this tendency the motivation for self-actualization. Self-actualization is commonly defined as a need to live up to

one's fullest potential. Given the right circumstances such as having water, soil, sunlight and other elements, an acorn has the potential to become a beautiful oak tree. In the same way, given the right circumstances, we as humans have the potential to grow into something psychologically beautiful. Regardless of what it is called, these theories have a common theme. Given the right circumstances, we will grow and mature as human beings.

Another important point that work in the field of developmental psychology has emphasized is that we all grow one step at a time and we can only make certain kinds of progress when we are ready for it. Just as a caterpillar cannot skip the chrysalis phase to become a butterfly, we humans cannot skip stages in our own development. The well-known developmental theories of Jean Piaget, Sigmund Freud, Erik Erikson, and Daniel Levinson all assume that

psychological development occurs in an invariant sequence of numerous stages. This notion assumes that we develop only one step at a time and that certain types of development are only possible when we have reached a certain stage. These two points discussed above are of crucial importance in understanding the development of our own consciousness. In the following sections, we will examine this developmental process in detail.

FROM SUBJECT TO OBJECT

First, let us investigate how human development relates to the subject-object differentiation in consciousness. We all have the capacity to experience things both subjectively and objectively. When I feel a mysterious sense of unity with the beautiful ocean in front of me, I am most likely experiencing this subjectively. When something is experienced subjectively, it is experienced not as separate from the self

→ | FROM THE FIELD

“ I have been here before, But when or how I cannot tell: I know the grass beyond the door, The sweet keen smell, The sighing sound, the lights around the shore. ”

DANTE GABRIEL ROSSETTI



but rather a part of the self (as the subject). On the other hand, when I analyze the composition of the ocean in front of me, it is most likely interpreted as an objective experience. When something is experienced objectively, it is experienced as something outside of the self as the subject. Therefore the boundary between the inside and outside of the self as the subject is largely what determines whether something is experienced as a subject or an object.

This boundary, however, can change from moment to moment. When I think, “I will rest my body” I have separated myself from my body. In this case, “I” is the subject and “my body” is the object. Although, in many cases I tend to think of my body as part of my self, I have created a boundary between “I” and “my body”. My body is now an object that I influence and interact with. This differentiation between subject and object is extremely important in understanding the development of consciousness since the location of the boundary between the subject and object may correspond to different levels of human development. In the beginning of life, most things are experienced as one subjective blob. There is minimal differentiation between the subject and object. As we grow up, we begin by differentiating object from subject. This is the beginning of what we traditionally consider “consciousness”. We begin experiencing things more and more as separate from the self, as objects to influence and interact with. These differentiations enable us to become beings with the ability to “perceive” things and thus beings with intention.

A little later in our childhood, we develop the ability to think about our perceptions and intentions. At this stage, we not only separate objects from the subject, we can also separate what used to be the subject and make that into an object as well. Before this stage, I could separate the object from the subject but I could not think about myself separating the object from the subject. In this new stage, I can think about myself differentiating the object from the subject. In other words, I am able to separate what used to be the subject (i.e., my mind) and make that into an object. I am objectively thinking about how my mind is working. In modern psychology, this is often referred to as the “theory of mind”. My mind can now become something I influence and interact with. As we progress further in our maturation process, we eventually arrive at a stage where we develop the ability to think about ourselves thinking about how our mind is working. At this stage, we are not only able to think about separating objects from the subject, we also are able to separate what used to be the subject (i.e., myself thinking about separating objects from the subject) and make that into an object as well. In sum, as we mature, we become increasingly conscious about how our own minds work. In other words, our self-awareness increases. As we will see in the following discussions, this has some important implications on other aspects of human development.

#### FROM EGOCENTRIC TO WORLDCENTRIC

Let us now consider how this increase in self-awareness influences on our sense of morality. As we develop an ability to think objectively about our own minds, we become increasingly aware that what goes on in our mind may be

different from what goes on in other people’s minds. Therefore, the more we develop, the more we begin considering the perspectives of an increasingly wider range of people. As a result, we end up understanding the thoughts and feelings of a wider range of individuals. First, we begin our lives focusing on, “what is best for myself”. Then we move toward, “what is best for myself and the person I am directly interacting with right now”. Then we begin to focus more on, “what is best for my family”. Later on this may turn into, “what is best for my community” and then, “what is good for my nation” and ideally, this may continue further until we begin focusing on “what is the best for the entire world”. In the early stages of life, we are unable to see things from another person’s perspective. This state is commonly referred to as egocentrism. When we become older we become less egocentric and begin understanding that our views, needs, and desires are sometimes different from those of others. And as we become less egocentric, we become more group-centric of increasingly larger groups. Much of the literature on moral development has considered this notion in great detail.

For example, Lawrence Kohlberg, one of the well-known theorists on moral development, claims that we progress through three general levels of morality<sup>4</sup>. In the first level, commonly referred to as the preconventional level, what is morally good or bad is largely determined by our own personal needs and desires. If some event or behavior satisfies our own needs or desires, it is considered to be morally good. If it prevents them from being satisfied, it is morally bad. This view of morality roughly corresponds to the world of the egocentric child. In the second level of moral development, the conventional level, our increased awareness makes us more concerned about the thoughts and feelings of others. In the earlier stage of this level, our sense of morality is largely determined by what other people think about us. If others approve of a certain behavior or event, it is perceived as morally good. If others disapprove, it is perceived as morally wrong. In this stage, we are concerned about the thoughts and feelings of specific others in addition to our own needs and desires. In a later stage of the same conventional level, we begin to view rules and laws as a necessity that exists for the sake of social order. In this stage we believe that we should follow the rules because social order allows for a greater number of individuals to lead a satisfying life. We can see that in this stage we begin considering the well-being of more than just the people we directly interact with. There is however, an even more advanced level of morality. This third and final level of morality, known as the postconventional level, begins when we start feeling that conventional laws and the general social system are not always respectful of all individuals in society. This leads us to develop our own individual sense of morality beyond what society has in place. This individual sense of morality is designed to be respectful of a wider variety of individuals than the existing social system.

As another theory of moral development, let us consider Carol Gilligan’s well-known work on women’s moral development<sup>5</sup>. The first stage in Gilligan’s theory is known as “Orientation to individual survival.” This stage is somewhat similar to Kohlberg’s preconventional level except that it is



focused on contrasting one's own needs and desires against the needs and desires of others. In this stage, the needs and desires of the self as an individual are more important than those of others. What is good for me is what is morally good in general, even if it does not make other people happy. The second stage is referred to as "Goodness as self-sacrifice." In this stage, we think that it is morally good to sacrifice our own needs and desires if it makes other people happy. In other words, what is satisfying for others is what is morally good in general, even if it means that I have to put my own needs and desires aside. In the last stage, known as, "Morality of nonviolence," our perspective

consciousness is more or less an undifferentiated subjective blob of experience. We just experience the "I" or the self as the subject. We feel connected to the whole world and do not have the ability to objectively think about ourselves or anything else in the world. As our consciousness develops, we begin seeing the environment as separate from us as individuals and the environment becomes something we interact and negotiate with. A little later, we begin seeing our individual selves (e.g., our own bodies & minds) as separate from the "I" and this also becomes something we interact and negotiate with. This corresponds to the development of the "me" or the self as



changes. We stop seeing the world through a "my needs" versus "your needs" lens and begin using a new perspective focusing on "how can we satisfy our needs?" When we reach this stage, it is no longer a question of what is good for whom. Instead, we focus on what is good for all of us involved. What is morally good is what "we" want rather than what is best for "me". In fact, in this stage what is best for "me" becomes what is best for everyone involved. Although the details of the theories differ, we can see that there is a common core in the theories of moral development discussed here. The more we progress in our development, the less self-centered or group-centered we become. As we grow, we become more and more aware of the desires of a wider range of people.

#### FROM OBJECT TO SUBJECT

Now that we have considered developmental processes in two psychological domains, let us examine the relationship between the development of self-awareness and the theories of moral development from a slightly different angle. As mentioned earlier, in the beginning of life our

the object. The more this occurs the more we view ourselves as isolated individuals disconnected from the rest of the world. As we slowly forget that we are connected to the whole world, we become increasingly insecure and protective about our own existence. Just as we cannot directly look into our own eyes, we slowly lose sight of the "I" and begin to believe that the "me" is all that exists. We feel like we are isolated beings in an alien world. The more this happens, the more we desperately try to interact with and influence the "me" and the world around it to maintain this "me."

A little later in life, as we mature and slowly overcome our insecurities, we begin to realize that the "me" as an individual is only a product of our imagination. We slowly realize that the only thing that really exists is the all connected world (i.e., what we used to experience as the "I"), and that we as individuals are not mere isolated beings in an alien world. Little by little, we stop identifying with the "me" as an individual and therefore we begin focusing less and less on interacting with and manipulating the "me" and the world around it to maintain this product of

our imagination. We gradually stop seeing the “me” as a separate entity that needs to be controlled and protected but rather as something connected to all of the energy in the world. The more this happens, the less defensive we become about our individual selves and the more we naturally consider the desires of a wider range of people. Although our consciousness at this stage slowly begins to resemble the pure and simple experience of the “I” in the beginning of life, it is not quite the same. In contrast to the experience of the “I” in the beginning, we become consciously aware of ourselves experiencing this connectedness. Instead of the “I” connecting with the world, the “me” is connected with the world. Perhaps this is the difference between the innocent infant and the wise sage. In time, the innocent infant will lose sight of his or her connectedness with the world while the wise sage remains consciously aware of it. In the end, a very small minority of people who are very fortunate with their circumstances and health may reach a state of complete ego transcendence. This is a state in which the “I” completely disappears (the literal meaning of “ego transcendence”) and everything is integrated as “me.” But since we cannot conceive of a “me” without an “I” we tend to say that we are just experiencing the “I” (the subject) at this stage.

In sum, we begin by venturing out of the “I” into the world of isolation and alienation and then we conclude by returning back to the “I”. It is as if the “I” is playing a game of hide and seek with us. We lose sight of it in the middle but, eventually, we find it again in the end. In this way, we experience our lives like many of the stories we love all around the world. It has a peaceful beginning, isolation, conflict, and excitement in the middle, and then a peaceful ending after the climax. Perhaps this is why Black Elk, the well-known sage of the Lakota native North American tribe, said, “The life of a man is a circle from childhood to childhood, and so it is in everything where power moves”<sup>6</sup>. Just as the actual game of hide and seek requires a certain amount of time for us to be hidden, perhaps the “I” requires a certain amount of time to be tucked away from conscious awareness. It seems that seeing our true selves may be more meaningful after it has disappeared for a while.

#### FROM PERSONAL TO COLLECTIVE

In sum, the more we progress in our personal development, the more we relate to each other as individuals, as well as groups, with love and respect. This implies that the amount of respect and love we have for others is an indication of where we are in our own personal development. Moreover, where most of us are in our own personal development is a reflection of where we are in the process of evolution. This also means that the more we progress in our personal development as a collective group, the more evolutionary progress we make as a culture of human beings. It takes a critical mass of individuals at an advanced level of personal development for a certain culture to evolve to the next level. Where a certain culture is in the evolutionary process is determined by where the majority of people in that culture are in their personal development. Every culture is at a slightly different point in evolution because the majority of people in each culture are at slightly different stages in their personal development. This viewpoint, however, must be

considered very carefully. Although many people who consider themselves advanced in their development try to help people in what are they consider “less advanced” cultures, much of these efforts turn out to be detrimental rather than helpful in the long run. In many cases, it is merely a rationalization for some type of personal gain. Even if it is not for personal gain, our impatience and attitude of superiority tends to make us try to implement change without truly respecting the natural growth process of the people in the culture. This often leads to an imbalance between the new social and physical structures and the consciousness of the people living there. We must keep in mind that in order to be helpful to a group of people, we must patiently provide them with the attention and respect that is conducive to the natural development of the individuals involved.

Perhaps the central message here is that development cannot be forced. We often become concerned that people are not making the developmental progress that we expect and end up feeling frustrated trying to “make” them grow. Trying to “make” others grow, however, may not only be unnecessary but may also act as a hindrance to their natural development. As discussed earlier, there is a natural sequence for psychological development and it is a natural unfolding process that requires time. Just as a plant grows best when it is provided with the necessary nurturance and environmental elements, our natural development process is best facilitated by optimal nurturance (i.e., love, respect & care). If we are mindful of this, it may help us remain patient and hopeful that people will develop when they are ready. George Boeree, a wonderful colleague of mine, uses a beautiful metaphor that applies to this general process of psychological growth. «[It is] a little like the unfolding of a rose bud, each petal opens up at a certain time, in a certain order, which nature, through its genetics, has determined. If we interfere in the natural order of development by pulling a petal forward prematurely or out of order, we ruin the development of the entire flower”<sup>7</sup>. Although our petals are sometimes pulled prematurely, let us become more mindful of this process and learn to patiently appreciate the natural unfolding of petals in all things<sup>8</sup>.

<sup>1</sup> ROGERS, CARL, R. *On becoming a person*. Boston: Houghton Mifflin, 1961.

<sup>2</sup> JUNG, CARL, G. *The undiscovered self*. London, UK: Routledge, 1958.

<sup>3</sup> MASLOW, ABRAHAM. H. *Motivation and personality* (2nd ed.). New York: Harper and Row, 1970

<sup>4</sup> KOHLBERG, LAWRENCE. *The philosophy of moral development: Essays on moral development* (vol. 1). San Francisco: Harper & Row, 1981.

<sup>5</sup> GILLIGAN, CAROL. *In a different voice: Psychological theory of women's development*. Cambridge, MA: Harvard University Press, 1982.

<sup>6</sup> BLACK ELK, WALLACE, H., - LYON, WILLIAM, S. *Black Elk: The sacred ways of Lakota*. San Francisco, CA: Harper San Francisco, 1991.

<sup>7</sup> BOEREE, GEORGE. *Erik Erikson*. 2006. Shippensburg University. 12 Nov. 2008 <<http://www.ship.edu/~cgboeree/erikson.html>>.

<sup>8</sup> For a more detailed explanation of these theories, please refer to Sato, Toru. *The Ever-transcending Spirit: The Psychology of Human relationships, Consciousness, and Development*. Bloomington, IN: iUniverse, 2003. ■

# INTEGRAL PHILOSOPHY AND THE EVOLUTION OF CONSCIOUSNESS

STEVE MCINTOSH



Steve McIntosh is the author of *Integral Consciousness and the Future of Evolution* (Paragon House, 2007). He is the founder and president of *Now & Zen, Inc.* in Boulder, Colorado, and an honors graduate of the University of Virginia Law School. The author's website: [www.stevemcintosh.com](http://www.stevemcintosh.com)

**F**ROM A SCIENTIFIC PERSPECTIVE, how do we explain the phenomenon of the evolutionary appearance of human society and culture? If humans are simply highly intelligent animals, why is it that our culture evolves and develops in such a dramatic fashion? The social organization of other intelligent animals does not generally evolve unless there is a corresponding evolution in their biology. So what is it about humans that gives us this unprecedented ability to do things like build cities, fly to the moon, compose symphonies, and contemplate the nature of reality? The clear answer is that the *consciousness* of humans can evolve in ways that do not depend on the biological evolution of our brains. Unlike other animals, humans have demonstrated the ability to extend our consciousness by developing our society and culture.

The special evolutionary significance of human consciousness is currently disputed by some scientific materialists and postmodern academics, who often label such thinking as "species-centric." However, once we face the fact that human consciousness evolves in unique and unprecedented ways, we have to acknowledge that there is indeed something special about humans that sets us apart from other animals. And if we want to better understand why and how human consciousness evolves, we have to look

beyond science alone for explanations. Recently, a number of philosophical breakthroughs have arisen that shed new light on the evolution of consciousness. These insights have come from the enlarged understanding of consciousness

and culture provided by *integral philosophy*. So in this article we will take a brief look at integral philosophy's new understanding of evolution and suggest how this perspective promises to help us address the growing global problems we face here at the beginning of the 21st century.

Integral philosophy is a new theoretical synthesis that combines previous spiritual philosophies of evolution (such as those promulgated by Alfred North Whitehead and Pierre Teilhard de Chardin) with the fresh insights of system science, the perspectives of developmental psychology, and the inclusive values of postmodernism. Currently, the most significant proponent of integral philosophy is the American author Ken Wilber, but important contributions are also being made by other integral thinkers. Integral philosophy's value is found in the way it helps us better understand the connection between the evolution of human consciousness and

the evolution of human culture. From an integral perspective, the solution to almost every human problem can be achieved by *raising the consciousness* of those who are creating the problem. Thus, integral philosophy's enlarged understanding of the evolution of consciousness can help us make real strides in the improvement of the human condition.

→ | IN DEPTH

*"Is that which  
is holy loved by  
the gods because  
it is holy, or it  
is holy because  
it is loved by  
the gods?"*

PLATO

HUMAN CONSCIOUSNESS  
IS CONTINUOUSLY EVOLVING

As integral philosophy looks at science's story of the universe (setting aside any consideration of the ultimate source or destiny of this creative unfolding), it can see in the timeline of evolution from the Big Bang onward, long before the appearance of life, how matter came to be organized in increasingly complex arrangements, eventually resulting in the formation of our solar system and our planet. For example, we can see how the very structure of the periodic table of elements provides a kind of biography of pre-living

matter as it passed through its sequential stages of increasing complexification. Then, once our planet had consolidated, material evolution continued to progress until it produced the dramatic emergence called life. Once life appeared, evolution demonstrated new capacities. Life used new methods of development and evolved at a faster pace than matter. Life became increasingly more organized and complex until it produced what can now be recognized as the dramatic appearance of human consciousness.

The evolutionary novelty of humans was not really a biological breakthrough. In fact, the biological differences between early humans and their immediate animal ancestors were barely noticeable. The evolutionary leap constituted by the appearance of humans was *internal* – it came about through the advent of self-consciousness. This self-awareness, this consciousness of consciousness itself, appears only in humans. And it is the emergence of this new self-reflecting ability in humans that marks the real beginning of the developmental domain of cultural and historical evolution.

The integral perspective thus rejects the contention that there is nothing particularly unique about human awareness, arguing that human consciousness can indeed be distinguished from other types of observable consciousness. In fact, according to integral philosophy, the appearance of human consciousness is an evolutionary event which has a significance equivalent to the original emergence of life from inanimate matter.

So why does this self-consciousness in humans make such an evolutionary difference? It is because with self-awareness comes the ability to take hold of the evolutionary process itself. Through self-reflection, humans have the unique abil-

ity to see themselves in perspective within the scale of evolution, and this creates both the desire and the ability to improve their condition relative to the state of their animal cousins. And for generation after generation humans have generally continued to improve their conditions.

The evolutionary significance of human consciousness is clearly demonstrated by the now obvious fact of global human culture. Development in the complexity of human cultural structures is undeniable. And like the previous evolutionary breakthrough seen in the appearance of life, the appearance of human culture is accompanied by new methods of development and a new pace of progress. Just as life evolves much faster than inanimate matter, human consciousness and culture evolve much faster than life. However, even though the emergence of human consciousness and culture constitute a new domain of evolutionary progress, many of the methods, habits, and laws of evolution still apply<sup>1</sup>. Indeed, integral philosophy achieves much of its power through its ability to recognize how the influences of evolution are affecting human consciousness and culture in a manner very similar to the way they influence the development of matter and life.

Scientists have found that the biology of the human brain has been evolving continuously since pre-history, yet the brain size and overall DNA of the humans who inhabit the world today are very similar to the humans who lived during the last ice age. So even though our brains are still evolving, this cannot by itself account for the tremendous evolution of human consciousness during this same period. Although there has been very little biological evolution, there has nevertheless been significant progress in what can best be described as the evolution of the human mind.

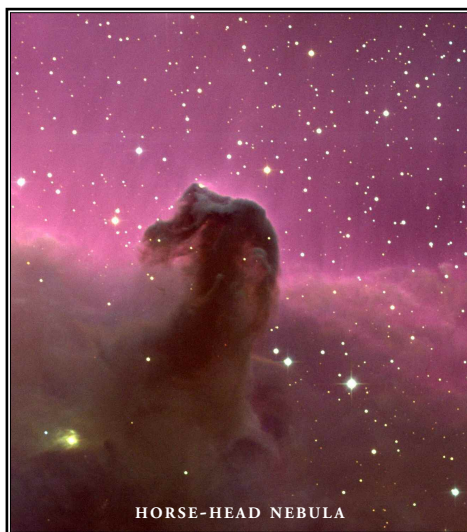
Whether those who live in developed societies have minds that are “more evolved” than humans who lived in the Stone Age is certainly controversial. But it seems to me that the amount and complexity of information – the sheer number of words and images – processed by the average citizen in the developed world is orders of magnitude greater than the quantity of information processed by our prehistoric ancestors. And not only are most modern humans conscious of a greater quantity of information,

they are also conscious of fine distinctions of quality that would have been lost to their forebears. A modern human’s sense of smell or ability to recognize animal tracks may be less than her ancestors, but her ability to discriminate the myriad types of aesthetic experience available today is unquestionably more complex – her access to food, music, art, media, travel, and technology give her a range and degree of choices that are significantly greater than those available to people who lived in the Stone Age.

Moreover, educated moderns have a conceptual ability that is not found in tribal peoples; moderns are able to think about themselves

and their society from enlarged perspectives that Stone Age peoples do not have. But you may ask, how do we know this? How can we say for sure that the consciousness of a modern human is “more evolved” than the consciousness of a person living in 8,000 B.C.? Well, numerous studies<sup>2</sup> involving extensive interviews with contemporary indigenous tribal peoples confirm that their thinking and perceiving is largely “representational,” that the words they use can usually only match individual objects, not entire categories or larger, more general types of phenomena. This research indicates that the consciousness found in most tribal peoples is generally not capable of thinking in syllogisms or logical types. Comparisons between objects are made on the basis of physical attributes with functional or conceptual similarities being largely ignored. This research does not suggest that there are any biological or racial differences between peoples who live “in different times in history,” but it does provide evidence that there are significant, measurable differences in the development of their respective stages of consciousness.

So how does this happen? How is it that our minds can evolve without the corresponding evolution of our brains?



HORSE-HEAD NEBULA



As noted, an infant born today has pretty much the same biological equipment as an infant born ten thousand years ago. Yet an infant born today in the developed world will be able to stand on the shoulders of the giants of history and assimilate the lessons of the last five thousand years of human cultural evolution by the time she graduates from college. Obviously, the reason that the consciousness of moderns is measurably more developed than our prehistoric ancestors is that the achievements of each generation have been accumulated and passed on through the development of things such as language, art, and technology. As human culture develops and evolves, human consciousness evolves along with it.

#### DOMAINS OF EVOLUTION

Integral philosophy recognizes that the evolution of human consciousness actually occurs in a distinct “domain of evolution” that is connected to, yet partially independent from, biology. Although there are measurable differences in neurological activation (electrical and chemical activity) between the brains of primitives and moderns, the biological structure of the brain is effectively the same. Again, before the appearance of humans, an organism’s inside mind and outside brain evolved together in lockstep – for an animal to become appreciably smarter it has to evolve biologically. But with the advent of humans, the internal domain of consciousness is partially liberated from its biological constraints and is able to embark on the path of a wholly new type of mental, emotional, and spiritual evolution. However, the essence of this development is *within* consciousness and culture; it is occurring in a domain that is best described as the internal universe.

Rene Descartes’ philosophical distinction between mind and matter (now known as “dualism”) has been largely rejected by the scientists who maintain that mind is just an aspect of matter. So as integral philosophy attempts to include and transcend the scientific worldview, it takes notice of the problems of dualism, and thus avoids naively proposing a return to this way of seeing things. According to integral philosophy, the reality we are familiar with does not consist of a natural world and a supernatural world – the external and the internal are both essentially natural. But although the internal and external are recognized as different phases of the same thing, that “thing” is not merely particles of matter.

The diagram shown in Figure 1, illustrates the nested nature of the internal domains of evolution. The concentric circles show how life emerges from inside matter, how consciousness emerges from inside life, and how culture develops, in a way, inside consciousness through the relationships found in the internal domain that exists “in between” the consciousness of individuals. Figure 1 also shows human-made artifacts in the objective domain (such as languages, technologies, art, architecture, etc.), because even though artifacts are not natural evolutionary systems (like organisms or ecosystems), they are significant in the way their development “stands in” for the lack of biological evolution and provides the external physical complexity that supports the internal evolution of culture and consciousness. Figure 1 thus charts all the various types of evolution

– the chemical and geological evolution of matter, the biological evolution of life, the personal evolution of consciousness, the collective evolution of culture, and the corresponding development of material artifacts. Figure 1 also shows how these different types of evolution fall into three main categories: objective, subjective, and intersubjective; or put more simply: nature, self, and culture.

Integral philosophy’s explanation of the evolving universe, which relies on the recognition of these three evolutionary domains – nature, self, and culture – could be criticized as a kind of metaphysics. And to the extent that “self and culture” are not observable objects, to the extent that these realities are distinguished from “nature,” their investigation does literally go “beyond physics.” Thus the exploration of these realms can be characterized as “metaphysical,” as that term was originally understood. However, scientific philosophies that insist that nothing is essentially beyond the laws of physics are themselves highly metaphysical in their assumptions about the nature of being. So no matter how you try, when you ask questions about the nature of the universe – when you ask questions about the real nature of evolution – you can’t avoid metaphysics. Whether your viewpoint is informed by pre-modern mythology, early modern dualism, late modern materialism, postmodern subjectivism, or integral philosophy’s recognition of objective, subjective, and intersubjective realms, it is framed by assumptions that are essentially metaphysical. Yet the idea of the objective, subjective, and intersubjective domains of evolution seems far less metaphysical when we see how these categories are simply descriptions of the different types of evolution. Matter evolves, life evolves, consciousness evolves, and human history evolves, and these different types of evolutionary activity are what make these categories real.

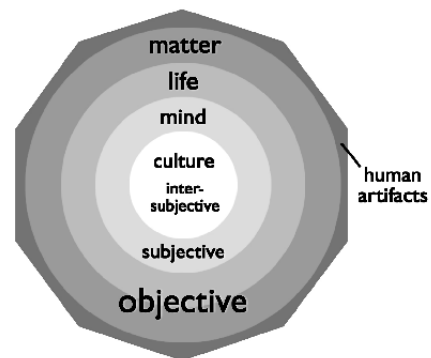


FIGURE 1. *Types of evolutionary development.*

#### THE PROMISE OF INTEGRAL PHILOSOPHY

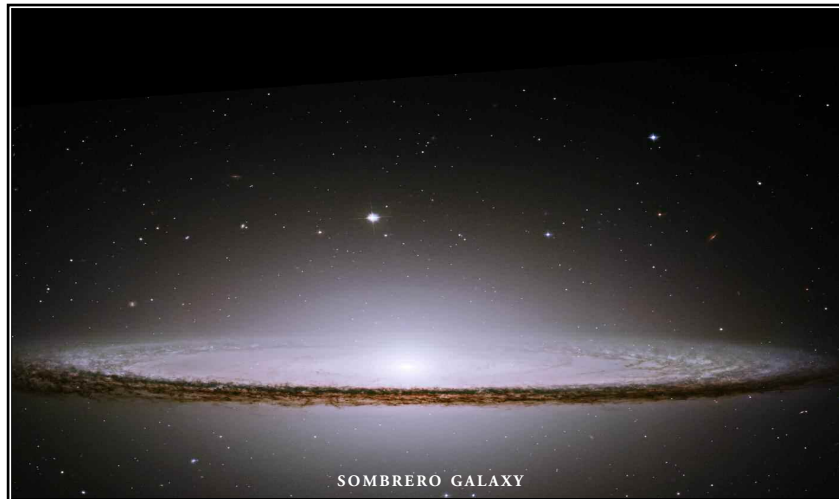
Although a thorough explanation of integral philosophy and its applications is beyond the scope of this article, we can perhaps begin to see how the framing of human consciousness in this new evolutionary light could be extremely useful. Once we recognize how the solution to almost every human problem involves the raising of consciousness, we can see the value of a philosophy that explains how consciousness is, in fact, raised. Integral philosophy reveals what might be termed “the physics of the internal universe.” It explains why some forms of culture have developed and others have stagnated or regressed. Moreover, it focuses on the

times in human history wherein dramatic steps forward have been achieved through the rise of new worldviews, as was witnessed during the Enlightenment of the 18th century or during the progressive developments of the 1960s.

The integral perspective recognizes how human nature evolves primarily through the dialectical development of dynamic systems of values. For example, it is through the emergence of more inclusive and complex value systems that humans have been able to evolve their morality from egocentric, to ethnocentric, to increasingly more worldcentric conceptions. That is, as human consciousness evolves, the scope of those worthy of moral consideration expands from one's blood kin, to one's ethnic group, and eventually to a morality that includes all sentient beings. The new clarity that integral philosophy brings to our understanding of the evolution of human nature constitutes a kind of "Second Enlightenment." Just as the first Enlightenment opened up the external universe of matter and energy to a new era of exploration and discovery, the emerging integral worldview is opening up the "internal universe" of consciousness and culture to a similarly significant era of new discoveries.

Once we begin to see the evolving universe from the integral perspective, we see how profound and all encompassing evolution truly is. Evolution isn't just something that happened in the distant past; the same forces that turned rocks into rosebushes are actually more intense than ever now that humanity is beginning to understand how we are both the products of evolution and the agents of evolution. The first step was the Darwinian revolution in science; and now the integral revolution in philosophy is making it possible for us to become agents of evolution as never before.

Although the integral worldview is currently in its infancy, there are abundant opportunities to participate in this exciting cultural development. Wherever progressive, post-modern culture has become well established, there can now be found those who are beginning to investigate this intriguing new evolutionary perspective. The more you learn about the integral worldview, the more you may come to appreciate how its approaches are both idealistic and realistic. Browsing the web you will find a host of new books on integral philosophy, together with magazines, websites, salons, and gatherings of those who are coming together to discuss this new way of understanding the evolution of consciousness and culture.



SOMBRERO GALAXY

Ultimately, the best way to help those around us to evolve is to accelerate our own evolution by internalizing a larger spectrum of values. And this is what the integral perspective does – it helps us develop our ability to evaluate more effectively by using the healthy values of every significant worldview that has emerged along the timeline of human history. Thus, I heartily invite each of you to explore the integral worldview and begin using the power of this emerging perspective to make social progress and improve the human condition in meaningful ways.

<sup>1</sup> Integral philosophy's arguments and explanations about the overall unity of evolution in nature, self, and culture can be found in Wilber (1995) and McIntosh (2007).

<sup>2</sup> See Wade (1995) p. 77-96, Wilber (1995) p. 169-176. See also Habermas, (1979), McCarthy (1978), Luria (1976), Lundberg (1974), Scribner and Cole (1981), Werner (1940/1980), Levy-Bruhl (1910/1985).

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# BEYOND THE INFORMATION REVOLUTION

## SELF-TRANSCENDENCE: A RADICAL NEW FOCUS FOR BUSINESS AND ECONOMICS

CHRISTIAN DE QUINCEY



*Christian de Quincey, Ph.D., is professor of Philosophy and Consciousness Studies at John F. Kennedy University, US; Dean of Consciousness Studies at the University of Philosophical Research; and Director of the Center for Interspecies Research. He is also founder of The Wisdom Academy, offering private and professional mentorships in consciousness. Dr de Quincey is author of the award-winning book Radical Nature: Rediscovering the Soul of Matter and Radical Knowing: Understanding Consciousness through Relationship. His new book Consciousness from Zombies to Angels will be published early 2009. Samples of his writings on consciousness and cosmology are available at [www.deepspirit.com](http://www.deepspirit.com).*

*Modern lifestyles are increasingly addicted to information – getting it, sharing it, creating it. No doubt about it, information makes life more interesting and fun. But every little pixel comes at a cost, affecting our quality of life.*

REMEMBER THE GOOD OLD DAYS BEFORE THE INTERNET and email? Life was simpler. You could switch off the light, leave the office, go home and relax for the night. No obsessive checking your BlackBerry or iPhone. No YouTube, FaceBook, or MySpace to enthrall you. No compulsive tracking or updating blogs. No late-night browsing for bargains on eBay or Amazon. You had downtime. Remember that? Remember when it all seemed more sane – and safer? Plentiful fresh, wholesome food. Abundant clear, clean water. Breathable air. Cheap gas. And a beautiful big wide world of pristine mountains, forests, rivers, lakes, and oceans to explore. Alas, no more.

Today, the world is exploding with food riots, communities are parched for potable water and gasping for clean air, while others burn up bank balances to feed insatiable SUVs. And pristine nature? Forget it. Even the remotest places on Earth are polluted with plastic, poisoned with countless consumer chemicals.

Yes, we may long for the good old days before the information revolution – when life was far less complicated and more relaxed. Faced with big problems, people mostly knew what to do. It was easy enough to find the right answers. Not now. The recent global financial collapse is just a harbinger of what can happen when blind trust in information technology runs so deep and wide that the true seriousness of the situation is lost in the digital sinews of transnational computer networks. The challenges are huge and mind-numbingly complex. All around us, everywhere we look, we face the long, tangled tentacles of one global crisis after another: Environment. Economics. Education. Housing. Health. Hunger. Religion. Fuel. Food. Air. Water. War. And, of course, weather and climate change.

→ | LANDMARK

“What is your aim in philosophy? – To show the fly the way out of the fly-bottle.”

LUDWIG WITTGENSTEIN

CRISIS AS A WAY OF LIFE

Faced with a crisis, smart people find out what went wrong and what to do to fix it. But today the problems are so vast, so deeply intertwined, that even our best minds seem to be at a loss. The irony is stark: Blitzed by information overload, we are inspirationally challenged.

It's a common complaint: We have more information than we know what to do with. Yet what we have may not be enough to get us out of the predicament in time.

The problem, though, is not really information – either lack of it or too much of it. The problem is lack of *wisdom*. We have turned our backs on the plain old commonsense that comes naturally with the gift of consciousness. We pay more attention to digital data than to the qualities of mind needed to manage our immensely complex information systems.

Not only do we feel the pain personally, the entire economic system is in jeopardy. In our data-dependent corporate



culture, the worst executive sin is to say “I don’t know.” Information at the finger-tips is the Holy Grail, and if you don’t have it, then bluff it. Managers and politicians are afraid of being found out. Since nobody knows it all, everybody devises spins and stratagems for disguising and protecting their vulnerable information gaps. Corporate life thrives on second-guessing what the other guy knows – if he (and “he” could just as well be “she”) doesn’t know that you don’t know and you don’t know that he doesn’t know ... then who’ll ever know that nobody really knows?

One reason for the epidemic of ignorance and pretense in the worlds of business and politics is, I believe, because corporate executives have embraced new technology as a substitute for the human mind. Information systems have changed our working lives in fundamental ways, yet millions still hardly understand the first thing about computers. (Why, for instance, do politicians accept touch-screen voting, when the software is so vulnerable to hacking?) New technology has taken them – and the rest of us – into a new age where data manipulation is the new designer drug, flowing like super-charged electronic blood through the digital veins of the World Wide Web and its global network of ISP servers. It runs our lives.

To be sure, information technology quickens the pace of business. It helps keep the competition at bay. It gives executives that warm, sexy feeling called “the competitive edge” promised so loudly by the marketing hobnobs from computer and software companies. They can feel it in their fingers, yet in their guts many feel a gnawing uneasiness. The latest software update is just another fix. Gotta have it.

#### THE MYTH OF PROGRESS

Beyond the drive for ever-enhanced data efficiency is an implicit assumption that progress is good. And because information is essential for progress, ergo, information is good. But information must be managed: Enter computers and networks of information technology. Ergo, information technology is good. To many people, especially those earning a living from information technology, this last statement is taken for granted. However, we would do well to question it.

Information technology may be turbo-driving business and the rest of the world headlong into chaos – blind and oblivious to its impact on the greater ecological systems in which it is embedded. Surprisingly, it strikes many people as counterintuitive that information technology is *far more* environmentally destructive than the impacts of smoke-stack industry. Our local and global computer networks are utterly dependent on industrial technology for extracting, processing, and transporting the raw materials needed to build the networks. Hidden behind the clean and crisp design of your new laptop or cellphone stomps a massive ecological footprint – spewing toxins into air, land, and water. Bottom line: Information technology is pure economic and ecological overhead.

What is true of information technology is true for the business world and modern lifestyles in general. The problem with information – getting it and using it – is that it *costs*. Entropy, a basic law of physics, is now a cliché in the business world: “No free lunches.” It’s the sort of corporate graffiti executives are fond of. Everybody seems to be scrambling for a piece of the pie, before it’s all gone.

The scenario, simplified, runs on two assumptions: First, progress is good and, therefore, desirable. Second, progress should be measured in material gain. Following the logic, we are compelled to pit human ingenuity against the forces of nature.

We manipulate the raw material of the environment into more and more products – manufacturing order out of chaos. That’s the definition of progress. And how do we build order? By gathering, generating, communicating, sharing, and acting on *information*. Order is built up by corralling and concentrating the flow of energy and information from the environment and shaping it to suit our needs. Well, so be it – difficult to argue with that.

But remember entropy? There’s a price tag to every lunch – *we have to pay for the order and information*. The build-up of material order through the constant drive for development of next-generation products *necessarily* dissipates increasing quantities of waste and disorder into the environment. We pay for our order and information by polluting our rivers, lakes, oceans, land and the air that we breathe. That inconvenient truth is no longer so easily dismissed.

#### SOLD OUT OR SOULED IN?

Another glaring assumption, conspicuously overlooked in the information colonies – the Silicon Valleys, Glens, Glades, Beltways and Godknowswhereelse the information revolution is hatched – is this: Underlying the drive for material progress is the belief that *brute matter is all there is*. Dead stuff. Atoms colliding in the void. The paradigm of scientific materialism. Notice the dichotomy and contradiction here – a kind of metaphysical schizophrenia unconsciously driving the world of business and politics. On one hand, the ideal of progress flows from a divine mandate “Go forth and multiply; fill the Earth and subdue it.” On the other, fulfilling that mandate relies on the methods of secular science. Behind the religious impulse is a concern for the spiritual wellbeing of humans; behind science, is the assumption that what matters is only what you can measure. The digital dances with the divine.

Each shares the idea that *humans are special* – because we alone have souls (religion), or because we have unique brains and intelligence (science) and this gives us the right and the might to take whatever we want or need from the world around us. *Progress*.

But then we have a double price to pay. The advance of our information-addicted civilization is paid for not only by polluting the physical environment but also by degrading the spirit of humanity, our system of values – by *polluting consciousness*.

Values, such as compassion and empathy (not just for humans but for other animals, too), are compromised in exchange for accumulation of material wealth and the eternal pursuit of the almighty dollar. Not only have we “sold out” on nature; we have forgotten how to be “souled in.”

Without a parallel revolution – or paradigm shift – in human consciousness, in our value systems, the information revolution will be worse than meaningless. It will so degrade both our physical and psychological environments that we will self-consume in a globalized “heat death” eons

before that inevitable fate befalls the solar system. The looming environmental collapse is just a symptom of a much deeper and widespread psycho-spiritual malaise.

Unless information technology (and by extension, the entire domain of business, economics, and politics) is geared to what Brazilian educator Paulo Freire called “authentic liberation<sup>1</sup>,” it will increase psychic entropy in the form of alienation from nature. If the purpose of information is progress,

And, yes, information helps us manage that task. But information technology will not be sufficient to pull us through.

Humans are living examples of teleological systems. We think and act with purpose. Information without intention is like a thermostat without a governor. We need to align technology with *intentionality*. We need to develop and evolve – not only by focusing on the external world of nature, but also by turning the beam of consciousness on



KURT WEISER, *SEMI CONSCIOUS*, CERAMICS.

and progress means transforming our world, it sets humanity *against* our environment, rather than seeing us as part of a single, co-evolving interrelated system.

True authenticity comes with the realization that people are integral subsystems within the nested systems of nature. Unless information, and information technology, serve *self-transformation* we will continue to increase our alienation. Real progress liberates human potential and fulfills our co-evolutionary promise within a complex ecosystem.

#### BEYOND THE INFORMATION REVOLUTION

More than an information revolution, then, we need a consciousness revolution (that Sixties’ slogan just won’t go away!).

Ultimately, why do we need information? To help us work better. Why do we work? To help us cope and survive, generate order and organization as we face the unrelenting forces of nature. We work to ward off decay and chaos.

consciousness itself. In this way, information transforms into wisdom.

The information model – high-tech as a paradigm for business and human development – sells us short by turning the human/technology relationship on its head. Instead of creating systems that stimulate our highest capacities, we end up reducing people to the status of information processors. Instead of creative stimulation, we settle for mechanical simulation. We become virtual instead of virtuous.

There’s another problem. Digital technology elevates the importance of *memory*. Information is stored as data to be accessed and retrieved on demand. But life is more than memory. Life sparkles with *experience*, with *feeling*, with *creativity*.

Too much emphasis on memory – digital or neural – blots out the live current of experience that animates people interacting with each other and with the world around us. When memory dominates, intentionality is obscured,

and *we forget the driving purpose behind whatever we are recalling*. We lose our humanity in a storm of facts.

The high-tech model turns people into information processors *for something else* – whether it's sales goals, corporate bottom-line, market share, or industry leadership – *not for themselves*. But it is the nature of all living systems to be “for themselves,” to maintain their self-identity, to protect their defining boundaries, to enhance their own well being. When people work “for the organization,” without also ensuring sufficient self-growth, they become self-alienated, and they lose their driving purpose. In time, both individual and system fall prey to dysfunction and entropy.

#### A CONSCIOUSNESS REVOLUTION

It happens in organizations when people are valued more for what they know – for their information content, for their *memory* – than for who they are. Yet the greatest value someone can bring to an organization is his or her experience; not “experience” in the sense of “accumulated knowledge” (i.e. “memory”) – but experience as the vital flow of consciousness and awareness, the source of human choice and creativity ... in short, the *self*. Only when the self is welcomed, accepted and valued can a memory for facts and information be of any long-term value to the organization and the individual.

The exponential growth of data storage and exchange is inversely proportional to the cognitive, creative capacities of human beings to absorb and integrate information. The more we are exposed to the daily blizzard of digitized facts, the less we are meaningfully informed. Our mental bandwidth is not up to the challenge. The full, life-enhancing value of information can be realized only if coupled with evolution in the consciousness of the person exposed to the information storm. Growth in external, mechanistic information processing requires a corresponding internal development in consciousness – in our ability to create and express *meaning*. More than information processors, *we are meaning processors*.

Without an expansion of consciousness, our minds will remain vulnerable to information overwhelm. With expanded awareness, we may grow to include and integrate more details from the field of information and learn to recognize more meaningful patterns. Expanded awareness enables individuals to more easily single out specific elements from the background context, perceive relationships, and to reflect and act on them purposefully.

A preoccupation with information inhibits creativity and stifles intentionality by isolating the person from the world. Consciousness, as Freire pointed out, is a “problem-posing” faculty – it thrives by confronting problems, by free and open inquiry, and it produces solutions through a process of self-reflection, praxis, and creative transformation of information.

This leads to a new and radical purpose for business: to transform organizations by affirming the human capacity for self-transcendence – for reflecting and acting with integrity and authenticity, true to one's own spirit; and, in turn, contributing to the growth of the organization, and the larger society.

But honouring and nurturing the self is only a first step. While each of us is undoubtedly a unique individual, our individuality gets its uniqueness precisely from our relationship with all that surrounds us. Self-transformation, then, comes with the realization that who we are is literally a co-creation involving, ultimately, the entire world. At bottom, the self is a note in a symphony, a node in the ever-interdependent universal web of life and being. We are not just individuals; we are *interviduals*.

#### A NEW BOTTOM-LINE

So, what's driving the digital revolution? Well, we rely on information – from the media, from friends and family, from our churches, from science – to know what to think, what to *believe*. How else would we know how to act in the world?

But being informed is not enough. The human body-mind-spirit thrives on meaning. True progress cannot be measured in bits, bytes, or pixels, or even in dollars. In the end, it comes down to a deepening of meaning – a state of mind that improves the quality of life and our relationships with others.

Imagine, then, a new bottom-line for both our personal and professional lives: *transformation* – real honest-to-God progress, humans in harmony with nature. Life beyond the information revolution.

Nice idea. How do we make it real?

In my work as a philosopher and consciousness mentor, I guide students and clients through an easy-to-follow seven-step process. Think of it as a program for flexing the “muscles of the mind.” In consciousness work, the bottom line is always – *always* – a matter of *choice*.

This approach is not about more or better information, it's not about changing beliefs. It's about *letting go* of beliefs – especially those cherished beliefs we just *know* to be true.

#### BEYOND BELIEF

One of the strangest myths circulating in spiritual or New Age communities is the cliché “You create your own reality” or “Belief can change the world.” Nothing could be further from the truth. We have no evidence for this either from science or from spirituality. Nevertheless, there is a kernel of wisdom in this insight. But it gets lost when people confuse “belief” with “intention.”

Beliefs have no intrinsic power. They are mental abstractions, and never change anything. In fact, beliefs are just frozen fragments of consciousness, habits of mind. And like all habits, they turn us into machines. Habit is the enemy of choice.

By contrast, intention is creative and concrete, and has power to change lives. Intention is like a sharply focused laser-beam of consciousness. But to make a difference, to *manifest*, intention must be acted on through choice. That's what makes things happen. That's what brings about change and transformation.

Belief gets in the way. Sticking to your beliefs is one way to make sure you won't change anything – about yourself or the world. That's why I encourage people to cultivate *experience beyond belief*, as a path to transformation (see sidebar for a seven-step program).



## E X P E R I E N C E   B E Y O N D   B E L I E F

### STEP 1 - ACCEPT THAT BELIEFS ARE NATURAL

We all have beliefs. There's no getting away from that. It's a simple fact of life. It's natural to have beliefs – it's what our minds are for. They evolved to give us maps or shortcuts that help us navigate through life. Just don't mistake your beliefs for reality. The map is not the territory. You don't drive your car onto the map and you don't eat the menu. Yes, beliefs are natural, nevertheless they disconnect us from reality.

We turn our feelings into thoughts and words to communicate with others. Thoughts are the 'atoms' of belief.

### STEP 2 - RECOGNIZE THE ORIGIN OF BELIEFS

Every belief is composed of thoughts, and every thought begins as a feeling. Think about it: Long before you could think or speak, as an infant your life was flushed with feelings. Feelings came first. They are grounded in your body and connect you with reality.

### STEP 3 - REALIZE THAT EVERY BELIEF IS A HABIT OF MIND

Thoughts and beliefs are *abstractions* – literally "snapshots" of reality taken from the ongoing flow of experience as it happens moment by moment. They are frozen fragments of consciousness, mechanical habits that keep you stuck in the past. Mesmerized by your beliefs, real life flows past unnoticed. Here's how it works: You have an *experience*. Then you *interpret* it. Turn it into a *belief*. Then into *dogma*. Beliefs, then, are nothing but mental habits, stepping stones to dogmatism and fundamentalism.

### STEP 4 - FOCUS ON FEELINGS IN THE BODY

Feelings are literally the sensations you experience in your body. Learn to pay attention to them. Take time out to sit quietly and just notice what's going on, without trying to change anything. Simply feel your sensations – in your chest, around your eyes, in your legs, your back, your belly... Remember: Every thought begins as a feeling, and feelings connect us with the world. They are messages from nature. Learn what it means to *feel your thinking* – and not just think your thoughts.

### STEP 5 - STOP BELIEVING YOUR BELIEFS

"But," you say, "if I don't have any beliefs, I'll have nothing." Far from it. In fact, letting go of beliefs opens you up to *what is really happening in your experience – right now!* And experience is the royal road to reality. Have you noticed: Experience and reality always happen together, *right now*. Also, notice I didn't say "stop having beliefs." That would contradict Step 1. As long as you have a mind, you can't help having beliefs. It's what the mind does naturally, and you have little choice about that. But you do have a choice whether or not you *believe* your beliefs. You do not have to believe that your beliefs are *true*. Instead, you can learn to hold beliefs as "likely stories," as Plato once said. So, take courage, let go of your beliefs, don't hold onto them, and see what happens. I promise: You won't disappear, you won't die.

### STEP 6 - CULTIVATE BEING THE WITNESS

As you practice sitting quietly, feeling the sensations in your body, noticing thoughts as they come and go, arising from your feelings, you will come to a new realization about who you are. *You are not your mind. You are not your thoughts or beliefs.* In fact, you are not even your feelings. In this evolving state of consciousness, you will begin to experience a new sense of freedom. You may begin to notice something quite profound: *someone, or some other part of you, is observing everything that is going on.* The question is: *Who?* That's the sixty-four-billion dollar spiritual jackpot. It's the essence of spiritual practice. Who, then, is observing the flow of thoughts through your mind? Well, *that's* who you are! You are the Witness that unifies self and world. And the way to get to this realization is by practicing experience beyond belief.

### STEP 7 - SPEND MORE TIME IN 'SACRED SILENCE'

In the end, the core wisdom of all spiritual traditions is some form of "Let go and let God." Learn to just *be* – by yourself or in community. Be comfortable beyond thoughts, words, judgments, or beliefs. You don't need to sit still and quiet to practice this, but it helps. It takes some discipline to tame the mind, to wean it off its diet of beliefs, to break the habits of thoughts, desires, and fears that inevitably distract us and distort reality. After a while, when you pay more attention to the Witness, you come to realize that the deepest source of wisdom is not what you think or believe. Rather wisdom lies in that space of "sacred silence" beyond all words and ideas, where *what is* shines forth. Those who open up to it, often call it the Source – awakening to our true nature as "All-One."

Even after years of spiritual practice, we will still use computers. We will continue to search the media for useful information. It's not either/or. But something will have changed. We will act more from choice, not force of habit. We will overcome the epidemic of digital addiction that strains and stresses our lives – and the life of the planet.

We are entering a new era. Instead of acting as information peddlers, caught up in the global network of digital exchange, addicted to it as though our lives depended on it, we will serve ourselves and the world better by focusing on developing "technologies" of consciousness so that the human spirit is up to the job of rediscovering our place in nature.

Instead of living for the next informational fix to feed our insatiable minds, we will shift attention to something much more life-sustaining. We will experience something deep and vital. We will experience how we are all inextricably interconnected. And that will be a healing – our own and the Earth's, too. This, I predict, is what the next revolution will be<sup>2</sup>.

<sup>1</sup> Paulo Freire, *Pedagogy of the Oppressed*. Continuum International Publishing Group (2000).

<sup>2</sup> Details of how we can personally contribute to this revolution are presented in Christian de Quincey's *Consciousness from Zombies to Angels*, Park Street Press (January, 2009). ■

**CONSCIOUS EVOLUTION:  
CULTURAL TRANSFORMATION  
AND HUMAN AGENCY**

RIANE EISLER



*Riane Eisler is an eminent social scientist, attorney, and author best known for her best-seller *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.*

*Her newest book, *The Real Wealth of Nations: Creating a Caring Economics* – hailed by Archbishop Desmond Tutu as “a template for the better world we have been so urgently seeking,” by Peter Senge as “desperately needed,” by Gloria Steinem as “revolutionary,” and by Jane Goodall as “a call for action” – proposes a new approach to economics that gives visibility and value to the most essential human work: the work of caring for people and planet.*

*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 other books include 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.*

*Riane Eisler can be contacted at [center@partnershipway.org](mailto:center@partnershipway.org). Her personal website is [www.rianeeisler.com](http://www.rianeeisler.com).*

**H**OW CAN WE MOVE TO A MORE SUSTAINABLE, peaceful, and equitable future? Today the answer to this question is in *Critical* ways more important than ever before.

As we see all around us, many of the policy choices being made today are driving us toward an evolutionary dead end. But there is also in our time of rapid technological flux and social disequilibrium an opportunity for evolutionary breakthrough rather than breakdown – if adequate attention is given to the fact that most of our choices, including the choices of policy-makers, are profoundly, and to a large extent unconsciously, affected by the culture into which we are born.

The *cultural transformation theory* I introduced examines our individual and social choices from the new perspective of the domination and partnership systems as two basic possibilities for human culture. Based on a study of 25,000 years of the span of human life on this earth, cultural transformation theory provides a new action-oriented theory of cultural evolution that can be applied to meet the epochal challenges we face (Eisler, 1987, 1995, 1997, 2000, 2002, 2007; Eisler and Loye, 1992).

The departure point for cultural transformation theory is biological evolution: the recognition that humans are part of the continuum of life forms in nature. But while the neo-Darwinian emphasis in the study of evolution has been on the organism’s reaction or adaptation to a changing environment, my focus is on the organism as an active originator of change. Indeed, I argue that our appearance on the evolutionary scene initiates an age of co-creation or co-evolution (Eisler 1990, 1995, 1997, 2000, 2002).

I also emphasize another evolutionary development not generally recognized: that we humans are biologically equipped to derive enormous rewards of pleasure from caring connections – without which, because of our uniquely long childhood helplessness, we can not even survive. Throughout our history, we find evidence of our powerful life-long yearning for love and pleasure, as well as our profound yearning, only

→ | WITNESS

“ We are stardust,  
We are golden,  
And we got to get ourselves  
Back to the garden. ”

JONI MITCHELL

in rudimentary evidence in other life forms, for beauty, truth, and an equitable and peaceful way of living (Eisler 1995, 2000, 2007). In short, love, caring, and creativity as just as rooted in our biology as are violent competition and destructiveness – indeed, our strong human need to love and be loved, to create and care, is what most distinguishes our species.

The basic question that faces us at this critical juncture in our evolution is therefore what kind of social, economic, and cultural structure will support and enhance, rather than inhibit and distort, the expression and actualization of these uniquely human needs and potentials. Equally important, what changes in human consciousness – and thus actions – can help us move toward such a structure.

CONSCIOUSNESS  
AND SOCIAL CAT-  
EGORIES

Categories help us organize the barrage of sensory information we're faced with, starting in infancy. But while categories help us make sense of what's happening both inside and outside us, they also often limit what we perceive.

Some categories are part of our biological equipment, for example, hot or cold and hunger or satiation. But many more categories are culturally constructed. As linguistic psychologist Robert Ornstein writes in *The Psychology of Consciousness*, every language provides categories that mold consciousness.

Every conventional social category – religious or secular, rightist or leftist, capitalist or communist, technologically developed or undeveloped, Eastern or Western – only describes particular aspects of a social system. None of them describe the *totality* of the institutions, assumptions, beliefs, relationships, and activities that constitute a social system. They don't even take into account the importance

of the primary human relations: the formative childhood relations and the relations between the male and female halves of humanity – even though these relations are not only essential for survival but, profoundly affect how we come to think, feel, and, as we are now finding out from neuroscience, nothing less than our brain development.

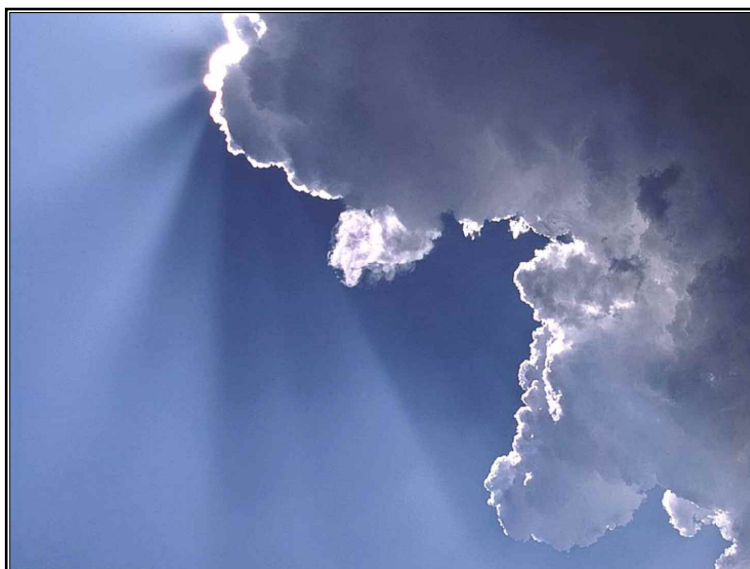
Cultural transformation theory introduces two new social categories that take these matters into full account: the

*domination system* and the *partnership system*. It counters the popular notion of cultural evolution as a linear progression from “barbarism” to “civilization.” Instead, it provides a narrative more congruent with what we actually see in history. It shows that all through our cultural evolution – from prehistory to our times – we find the underlying tension

between the partnership and domination systems as two basic «attractors» for social organization on a *partnership-dominator continuum*.

A central tenet of cultural transformation theory is that how our primary relations – the relations between women and men and between parents and children are structured are of central social significance. It challenges the notion that the most important aspects of a society are those that can be understood by

only studying the so-called public sphere of political and economic relations, with scant attention to the so-called private sphere of family, sexual, and other intimate relations. It posits that, on the contrary, it is through these relations that we unconsciously form the basic habits of feeling, thinking, and acting that operate in all our relations, from intimate relations in the so-called private sphere to international relations in the so-called public sphere.





Cultural transformation theory further shows that the ability to recognize patterns of partnership and domination in our psyches, in our relations, and in our society is a prerequisite to imaging more humane and effective ways of structuring human relations and institutions – and that such a restructuring is crucial for our world today.

In short, by identifying patterns and interconnections not visible using earlier theoretical frameworks, cultural transformation theory opens up the realistic possibility of fundamental cultural transformation through a shift to societies orienting primarily to the partnership rather than domination system — and with this, the possibility of more peaceful and equitable relations, environmental balance, and the greater realization of our unique human potentials.

#### MAKING THE INVISIBLE VISIBLE

We are used to thinking of matters pertaining to gender roles and relations as secondary so-called “women’s issues.” But what kinds of gender roles and relations are presented by a society as natural is a major mediating force between individual agency and social structure. Understanding this hidden dynamic is essential for both prediction and intervention.

Children universally form patterns of thinking, feeling, and acting based in large part on how the roles and relations of the two halves of humanity are socially constructed. After all, every child is born either female or male. And dominator gender stereotypes provide the very early social cues for how women and men should feel, think, and behave so that a dominator system is maintained.

I want to emphasize that what we are here dealing with has nothing to do with anything inherent in women or men. The problem is one of cultural conditioning for a particular kind of social organization. For example, studies contradict the assumption that testosterone inevitably leads men to express frustration and anger violently. In fact, there are studies indicating that when men who have low testosterone levels are given testosterone they actually become less violent<sup>1</sup>. What is critical is what kinds of social cues we receive in connection with hormonal arousal, which in the dominator model are equated with domination and violence – a lesson constantly taught boys, beginning with war toys when they are children to lifelong stories of the hero as killer.

As we see all around us in the movement of women into roles once reserved for men and the movement of men toward more stereotypically “feminine” activities such as childcare, both women and men are capable of assuming roles that are in dominator thinking assigned solely to one sex or the other. So the problem is socialization for dominator “femininity” and masculinity” – with the latter requiring a distancing of men from anything considered “soft” or “effeminate.”

This helps explain why the social psychologists David Winter and David McClelland both found that the intensified replication and amplification of stereotypes of dominator masculinity characteristically precedes periods of aggressive warfare and/or repression (McClelland 1980; Winter 1973). It also helps explain why during the dominator regression of the last decades of the 20th century we find the massive

replication and amplification of stories and images eroticizing domination and violence (Eisler 1995).

The unconscious internalization of a higher valuing of men and the stereotypically “masculine” also helps explain why in times of dominator regression we see a pulling back from the public funding of activities stereotypically considered “soft” or “feminine.” At the same time that the allocation of funds for caring for children, the elderly, people’s health, and the environment (all stereotypical “women’s work”) are slashed, funds are made available for building weapons, wars, and other stereotypical “men’s work.” (Eisler, 2007)

The relationship between teaching dominator gender roles and relations and regressions toward the dominator model also helps explain why a return to the «traditional» family (traditional being a code word for a male-dominated, authoritarian family) is a major priority for many leaders of so-called religious fundamentalism today, be they Muslim or Christian. It explains why this was also a rallying cry of both Hitler and Stalin.

Conversely, in the case of Scandinavian nations such as Sweden, Norway, and Finland, we can see that the higher status of women helps explain why these nations were able to institute policies giving priority to “soft” or caring activities, such as healthcare, childcare, and parental leave – and thus consistently have had high quality of life ratings in United Nations Human Development Reports, the World Economic Competitiveness Reports, and other global measures (Eisler, Loye, and Norgaard, 1995, Eisler, 2007).

As noted earlier, cultural transformation theory proposes that another major hidden mediator between human agency and dominator systems formation and maintenance is the replication of childrearing methods that make relations not based on hierarchies of domination not «feel right.» In its more extreme or «pure» dominator form, this is a process that produces the unconscious state clinicians call post-traumatic stress syndrome and I call the dominator trance.

Like the replication of dominator gender stereotypes, this replication of trauma through dominator childrearing functions primarily on an unconscious level. It is embedded in entrenched traditions that – as in the biblical adage «spare the rod and spoil the child» – have long been considered natural, and even moral.

Basically, a pure domination system can be viewed as a trauma factory, since the way it structures human relations – particularly intimate relations that involve touch to the body beginning in early infancy – tends to produce chronic post traumatic stress disorder. Indeed, if we look at what we today call trauma, we see that for the last several thousand years what during the Middle Ages was aptly referred to as an “earthly vale of tears” was considered by many people as “just the way things are.” Hence, to speak of trauma during the Middle Ages would have been just as incomprehensible as speaking about human rights. Neither concept has meaning in a system orienting closely to the dominator side of the partnership-dominator continuum.

For example, the inquisitions and witch hunts of the medieval Church, the drawings and quarterings used to punish rebels and other “criminals” by the medieval state, the chopping off of hands for thefts by medieval law, the

extreme economic deprivation of the mass of people who were serfs, the generally unsanitary and unhealthy living conditions, as well as the accepted brutal treatment of serfs in feudal fiefs – not to speak of women and children in households – are all situations that we today would describe as traumatic and, even beyond this, that clinicians identify as causative factors in chronic post traumatic stress disorders.

Even as late as the early 1800s, when there began to be some doubts about child beating as sound pedagogy, there was still a debate among educators whether, as a substitute for beatings, children should be taught to understand that “the parents’ will is supreme” by tying a child to a chair and/or lightly burning its hand with hot tea<sup>2</sup>. That is, the replication of dominator childrearing was still advocated by some “experts.”

More extreme recent examples are the deforming foot-binding of girls in pre-revolutionary China and the genital mutilation that still maims millions of girls in parts of Africa and Asia today – brutal practices replicated as valuable cultural traditions. Also perpetuating a dominator mindset are the madrases in Muslim nations where boys are beaten and maltreated in the name of fundamentalist religious education.

In sharp contrast, the second half of the 20th century has seen the growing understanding from scientific findings that traumatizing children has extremely adverse life-long effects. This is an important partnership trend.

But we are also seeing, as part of dominator regression, the renewed advocacy of abusive and violent childrearing in the name of religious morality. For example, claiming this will ensure children are “more faithful to God,” there are today a slew of “Christian” parenting books, tapes, and workshops that tell parents they must counteract “child-centered” parenting. Under the guise of morality, they admonish parents not to “overindulge” their children and instead follow “God’s way” – which they claim means teaching babies “high chair manners” through physical “chastisement,” forcing children as young as 8 months to sit with their hands on the side of their trays or on their laps, and forbidding any kind of fussiness – in other words, arbitrarily imposing parental domination through fear and force (Rosin, 1999).

Clearly this attempt to replicate and amplify dominator childrearing has to be exposed as what it is: cruel abuse to the little children directly affected and a danger to all of our future. Even more important, as I have proposed in my book *Tomorrow’s Children* and other writings, we need to institute courses on sound parenting in all our schools worldwide – particularly in light of the findings from neuroscience of the lifelong effects of either what I call partnership or dominator early childrearing on such vital matters as capacity to learn and to love, ability to be venturesome and creative rather than just take orders, and propensity to use violence (Perry *et al.*, 1996).

#### THE POLITICS OF THE BODY

The social construction of the two foundational templates for human relations – the relations between parent and child and woman and man – are very different in times and places orienting more to a dominator or a partnership model of society. In societies that orient closely to the domination system, these two foundational relations are structured in such a way that people learn early on, on the

most basic unconscious, bodily, level that what happens to the body of one type of person is legitimately to be decided by someone else (Eisler, 1995).

Dominator politics of the body are unconsciously internalized by children early on through dominator childrearing. As neuroscientists tell us, this may even be on a cellular, neurological, biochemical level, incorporated into the neural organization of the brain, which we now know to a large extent takes place after birth during the first years of life.

This feeling that dominator relations are natural is then culturally reinforced through dominator beliefs (myths and images) and institutions (educational, economic, etc.). And again on an unconscious bodily level, it is further reinforced through other dominator intimate relations, particularly sexual relations modeled on the dominator template.

In short, if we put together what we are today discovering about how both physical and psychological trauma alter body chemistry and brain development with an understanding of the hidden dynamics of dominator systems maintenance, we can better understand how people unconsciously replicate precisely the kinds of beliefs and institutional forms that cause them misery and pain (Eisler, 1995).

These processes relating to intimate relations play a major role as mediating dynamics between human agency and the maintenance of social systems orienting to domination. Together with other mediating dynamics such as the myths and stories we are taught as knowledge and truth as well as education and economics, this dominator templating of the foundational human relations in large part accounts for the dominator trance – a constriction of consciousness that makes dominating or being dominated seem the only alternatives.

This constriction of consciousness interferes with both men’s and women’s profound yearning for caring connections. It also interferes with the realization of our yearning for a more equitable and less violent way of living, and with the implementation of more humane and rational social and economic policies.

#### HUMAN AGENCY AND SOCIAL ORGANIZATION: FROM DOMINATION TO PARTNERSHIP

Our global crises cannot be solved within the system that has given rise to them. From the perspective of cultural transformation theory, the problem is not, as we are sometimes told, one of modern technology, but of the mix of high technology with a dominator social and cultural organization (Eisler, 1987, 1990, 1995, 1997, 2000, 2002, 2007).

The once hallowed “conquest of nature,” the violent conquest and domination of other humans, the global arms trade, the overbreeding that has led to the population explosion, the inequitable misdistribution of resources – all these could be changed through rational policies and actions. But the issue is not one of reason, but of the hidden dynamics that serve to replicate precisely the kind of social and cultural organization that has led to our global crises.

As we have seen, cultural transformation theory identifies two basic templates that transcend conventional classifications based on right versus left, religious versus secular, capitalist versus communist, level of technological development,

time, and geography: the domination system and the partnership system. It makes it possible to see that the degree to which a society orients to one or the other of these systems on what I call the partnership-dominator continuum is critical to whether a society will be more equitable or inequitable, more authoritarian or democratic, more peaceful or warlike.

Cultural transformation theory also traces the tension throughout our cultural evolution between the partnership and domination systems in terms of what, in the language of nonlinear dynamics, we may call two attractors. While my earlier work drew primarily from data on Western prehistory and history, cultural transformation theory was tested by Chinese scholars at the Chinese Academy of Social Sciences in Beijing for its application to Asian history, and similar patterns were found (Min, 1995). Moreover, as I document in *Tomorrow's Children: A Blueprint for Partnership Education in the 21st Century*, all world regions have myths and stories about an earlier more partnership-oriented time, which is our common human cultural heritage.

The general sequence outlined by cultural transformation theory is as follows:

- 1 - During a period of massive disequilibrium linked to severe climate changes and environmental degradation as well as large scale population movements in prehistory, a shift from a partnership to a dominator direction in the mainstream of cultural evolution radically altered the course of civilization. For example, there is a general lack of fortifications and imagery idealizing warfare in the early Neolithic (and in some places as late as the Bronze Age). Thereafter, massive fortifications and imagery idealizing warfare appear, as well as major changes in all mythical images and stories, with a cumulating idealization, and even sacralization, of the infliction and/or suffering of pain.
- 2 - During most of recorded history, the partnership system has been subsumed by the domination system. There have been intermittent periods of partnership resurgence (e.g., early Christianity) in the West followed by periods of dominator regression (e.g., the Crusades, Inquisition, and witch burnings of the rigidly male-dominated, hierarchic, authoritarian, and highly violent subsequent orthodox Church).
- 3 - During modern history, along with the disequilibrium of the industrial revolution, the tension between the partnership and domination systems intensified. A powerful partnership resurgence becomes the major trend for this period. We find the cumulating challenge to entrenched traditions of domination by progressive movements worldwide. Sequentially, for example, we find the 17th and 18th centuries challenge to the “divinely ordained” right of kings to rule their “subjects”; the 18th, 19th, and 20th centuries challenge to the “divinely ordained” right of men to rule over the women and children in the “castles of their homes”; the 19th and 20th centuries challenge to the control of one race by another through the abolitionist, civil rights, and anti-colonialist movements; the 19th century pacifist movement and the 20th century peace movement; the 19th century feminist and 20th century women’s liberation and women’s rights

movements; the 19th and 20th centuries movements for social and economic justice, and most recently, the 20th century indigenous rights and environmental movements and the movement worldwide challenging violence against women and children.

This cumulating movement toward partnership general systems guidance, however, has been countered by massive dominator systems resistance and punctuated by periodic regressions (e.g., Hitler’s Germany, Stalin’s Soviet Union, Khomeini’s Muslim fundamentalist Iran, the Taliban of Afghanistan, the so-called Christian right in the United States, etc.).

- 4 - Even though this struggle between partnership resurgence and dominator resistance/regression is still obscured by conventional systems of classification such as right versus left, capitalism versus communism, religious versus secular, etc., largely due to ever more rapid technological change, today it is coming to a head.

#### CONCLUSION

At our level of technological development we are on a collision course between the requirements of dominator systems maintenance and human species maintenance – a critical bifurcation that offers both unprecedented challenges and unprecedented opportunities for fundamental cultural transformation.

The disequilibrium entailed in the move to a new technological phase change based on nuclear, electronic, and biochemical technological breakthroughs is both a crisis and an opportunity. It is a crisis because we are at a point where the mix of a domination system’s guidance of policies and high technology is not sustainable. But it is also an opportunity because it is during periods of great disequilibrium that fundamental change is possible (Eisler, 1987, 1990, 1997, 2000).

In the last analysis, whether the development and use of our powerful technologies is governed by partnership or dominator social guidance is up to us – to whether or not we consciously chose to do everything in our power to accelerate the shift from a dominator to a partnership world. As cultural transformation theory emphasizes, this shift will not lead to an ideal, or even completely violence free, society. But it will take us to a society in which violence and domination are no longer institutionalized, in which they are not idealized as heroic or manly, and in which the infliction and suffering of pain are not sacralized as “the will of the gods.”

In this more partnership-oriented society, stereotypically feminine values, such as caring and nonviolence, and stereotypical “women’s work,” such as caring for children, for a family’s health, and ensuring that we have a clean and aesthetic environment, will no longer be relegated to a secondary place in the guiding social and economic policies. And both women and men will recognize that what distinguishes us as a species is not our “superior” capacity to inflict pain but our unique human capacity to strive for justice, beauty, and love.

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\*Parts of this article contain excerpts from an article that appeared in *The Evolutionary Outrider: The Impact of the Human Agent on Evolution*, David Loye, editor, Westport, Connecticut: Praeger Publishers, 1998. © 2008 Riane Eisler.

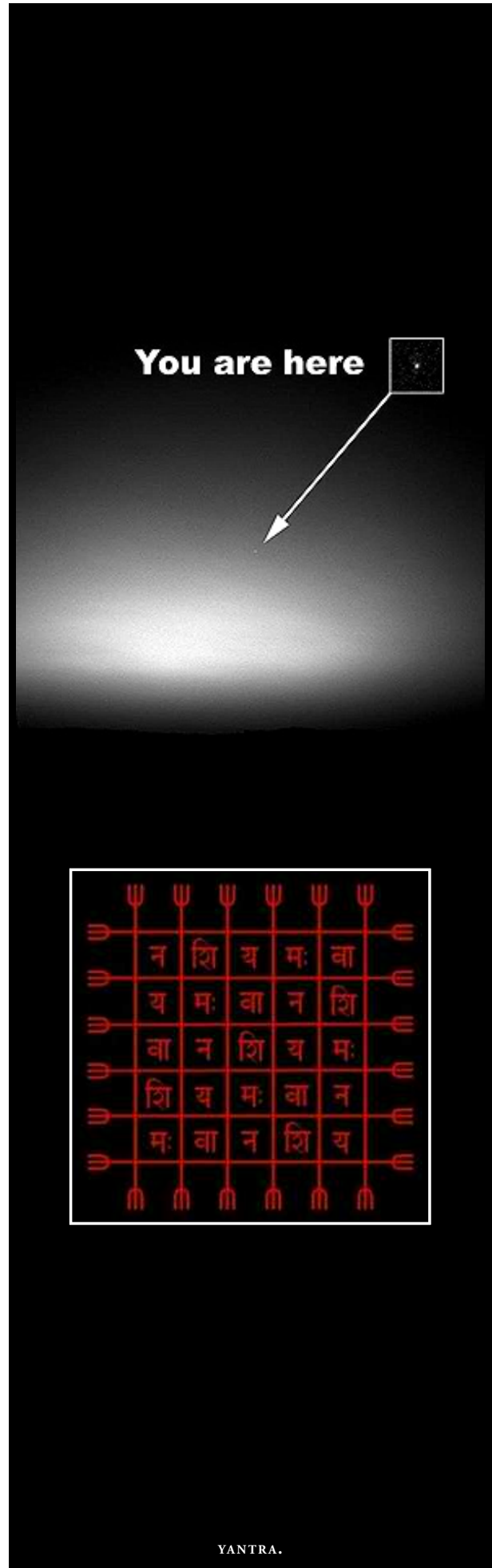
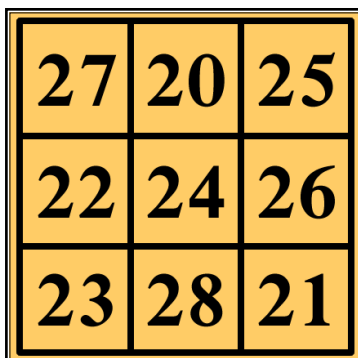


<sup>1</sup> Study conducted by Dr. Christina Wang at the University of California, Los Angeles, reported in *Newsweek*, July 3, 1995.

<sup>2</sup> K. Taylor (1987), "Blessing the House," *Journal of Psychobiology* 12:443-444.

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**A TRANSFORMATIONAL APPROACH  
TO A SUSTAINABLE FUTURE:  
CONSCIOUS LEADERSHIP**

JOHN RENESCH



*John Renesch is a San Francisco-based businessman-turned-futurist. His background includes over thirty years' experience as a business owner, CEO and Managing Director in real estate, investment securities and other industries within the private sector. Later, he edited a series of forward-thinking business anthologies including the original writings of over 300 visionaries from industry, academia and the professional community. His latest book is Getting to the Better Future: A Matter of Conscious Choosing. John's website: [www.Renesch.com](http://www.Renesch.com), email: [john@renesch.com](mailto:john@renesch.com)*

**W**E ARE AT A CROSSROADS in our evolution. Like all evolution, circumstances are a big factor. We now

possess the ability to rapidly go extinct. Unlike dinosaurs and other extinct species, we humans possess consciousness. We have the ability to think differently and make choices that influence our ability to remain viable inhabitants of Earth.

Presently, we have a major choice before us with regards to the challenges facing us as a global society. We can choose the pathological approach, fixing problems as they arise. The problem with this approach is we are living in a time when our ability to clean up after ourselves is insufficient for the sheer volume and scale of the problems we've created. While this has been the traditional way we've dealt with problems until now, it is no longer viable. Technology has enabled us to do more harm, faster and faster, and our thinking hasn't kept pace.

The alternative choice would be to take the transformational approach – a non-linear adventure into shifting the

paradigm of human consciousness. This requires a completely different worldview based upon new assumptions, values and attitudes. We are at stage in our maturation as a species when this is now the only viable approach to having a sustainable presence on this planet. To achieve this, we must grow up – to become more mature in the way we interact with each other and our environment.

Global events of the past decade have made it painfully evident we are still in an adolescent phase of our evolution. We continue trying to resolve our differences through force, which further divides us, while technology makes it easier and easier to do great harm. We continue giving legitimacy to systems that are dysfunctional rather than standing tall for long-term approaches to achieving a sustainable future. We have been spending like there is no tomorrow and feeling invincible while we indulge ourselves. Doesn't this sound like teenage behavior?

Continuing to think and behave like we have in the past is contrary to our best interest in the longer term. Working collaboratively appears to be both impractical and unattainable. This

apparent stalemate contributes to our becoming a resigned, impotent global population. Not only are we thinking and acting like spoiled adolescents, we also feel helpless about doing anything differently. Isn't this a sad state?

We can overcome this malaise of impotency by shifting our consciousness and following those who can envision transcending our present day conditions and creating new realities based upon new assumptions, attitudes and values.

«Conscious leadership» is the term coined several years back to communicate a more enlightened form of leadership, particularly applicable in the complex world we have created. We need a new kind of leadership to lead people, organizations and society through these critical junctures, determining the future our children and grandchildren will inherit. I call it «conscious» because our circumstances call for a higher state of consciousness – a state of mind that includes heightened awareness of what is needed for the

→ | ASTERISK

*“ We have trained men to think of the Future as a promised land which favoured heroes to attain – not as something which everyone reaches at the rate of sixty minutes an hour, whatever he does, whoever he is. ”*

C.S. LEWIS

whole of humanity *and* responsible action – both being held in a sacred context. To paraphrase His Holiness the Dalai Lama, the more clearly people see their predicament – that their fates are inextricably tied together and that all life is a mutually interdependent web of relations – “universal responsibility” then becomes the only sane choice.

Let us look at the dilemma facing humanity as a precipice rather than a crossroads. On the other side of the great chasm before us lies enormous possibility for humanity, all the things we dream about. Yet given the unknown dangers and apparently treacherous barriers that lie between the cliffs of today and the shores of tomorrow, the present situation can appear hopeless and impossible. But wait! Is that *really* true or is it merely our fear of the unknown?

Einstein once stated that those who achieve the impossible are the people willing to attempt the absurd. This is the challenge of the new leader – to look at seemingly hopeless situations with new eyes, to see possibility where others see no hope, to bridge this chasm of impossibility so consciousness, wisdom and practice can come together to transcend the human condition to which most people are resigned.

Take wars for instance, or terrorism. Advocates of traditional approaches to resolving conflict have turned their backs on a more collaborative form of reconciling differences and are calling their counterparts “idealists” or accusing them of being unrealistic – actions not conducive to reconciliation. This smacks of resignation and cynicism, resulting in enforced domination at best. Yet most nations insist on taking this approach. Continuing to do things that have never provided the desired result, while expecting they will somehow miraculously work “this time,” is one definition of insanity.

In 1994 as South Africa was seeking to end apartheid they created the Truth and Reconciliation Commission, heard from 20,000 people who were either perpetrators or victims of deep seated prejudice. The Commission succeeded in resolving generations of collective hatred and desire for vengeance. Riots and civil war were avoided. In spite of these positive results fourteen years ago, the rest of the world still insists on resorting to war to resolve grievances, reinforcing the old consciousness paradigm and causing more and more pain and suffering. This also leads to continued resentments which get repressed until they have a chance to explode into more violence later – sometimes decades later after the hate has been passed down to new generations. This is plain nuts when there’s a model for a better way!

Leadership is needed to start thinking differently. In the case of South Africa, it was Tutu, Mandela and de Klerk who led the way. This new leadership is not necessarily going to come from elected or appointed people – “official” leaders. It will come from people who see what needs to happen and have the courage to take a stand for the required actions or remedies. They do not remain silent. These new leaders are not irresponsible anarchists or rabble rousers but a breed of more mature, long-term thinkers who have developed a level of consciousness closer to what Einstein was advocating. These new leaders are all around us, in all parts of the world. They are individuals, organizations, communities, even nations we don’t normally think of as leaders or strong advocates of new ideas.

Our hope for a better world lies in these new leaders. They employ greater consciousness to create a better future. This is in contrast to remaining in the old consciousness which is resulting in greater disconnection, obsessive consumption, environmental degradation and cultural homogenization. Their thinking is based on assumptions that we are all connected, like leaves on the same tree, not separate entities competing for the same resources.

This new consciousness requires looking through a new lens toward the future. The old consciousness is based upon assumptions of zero-sum, for me to win you must lose. Another false assumption is we are separate and unrelated. Yet another has been that the earth’s resources are never ending and, in addition, meant exclusively for humankind to use. These outmoded assumptions have contributed to obsessive and addictive behaviors on a mass scale, such as consumerism, over dependence on fossil fuels, growing gap between haves and have-nots and other negative byproducts of a consciousness that has outrun its usefulness. Another byproduct is the dominating, hierarchical model for leadership. Here are a few comparisons between conscious leadership and traditional leadership:

| TRADITIONAL LEADERSHIP                     | CONSCIOUS LEADERSHIP         |
|--------------------------------------------|------------------------------|
| Politics prevails                          | Truth-telling prevails       |
| Tends to lead forcefully                   | Leads with presence          |
| Tends to be dominating                     | Possesses dominion, mastery  |
| Protects own image                         | Serves those who follow      |
| Intimidates, rules, manipulates            | Inspires, evokes greatness   |
| Relies on form, structure                  | Trusts in Self, other        |
| Outer-directed                             | Inner-directed               |
| Eventually becomes incompetent             | Continues to grow and learn  |
| More adolescent, even if highly-functional | Adult, wiser and more mature |
| Strong persona, maintains image            | Authentic and genuine        |

Through conscious leadership we can transcend traditional means of resolving conflict in our world. We will be able to transcend perverse nationalism, elitism and fundamentalism. Through conscious leadership we can create a way of life that is sustainable so our descendants will inherit a world that is life-affirming and flourishing for everyone. With the help of these new leaders, greater numbers will come to recognize the interconnectedness of all life. What a wonderful future we humans have waiting for us if we can get past this impasse of separateness. We will stand a greater chance of fulfilling a destiny that goes beyond our current level of evolution.

This “better future” is not the fantasy of one person or one group. It is a future that affirms and respects all life. It allows for every human to have their basic needs met and have the opportunity to be happy. It assures our planet will continue to serve as a hospitable home, following democracy pioneer Thomas Paine’s decree: «My country is the world. My countrymen are mankind<sup>1</sup>.»

This better future will require organizations that reflect this new consciousness – a far cry from the more typically dysfunctional or bureaucratic organizations of today. These organizations will be places where workers are aligned with this new consciousness. After all, where does a conscious leader want to work? Certainly not in an organization that is committed to maintaining the status quo! “Conscious organizations” will attract workers, investors, vendors and customers who reflect this new consciousness – people who want to do business with other people who are awake and more conscious, sharing in the greater vision for a better world.

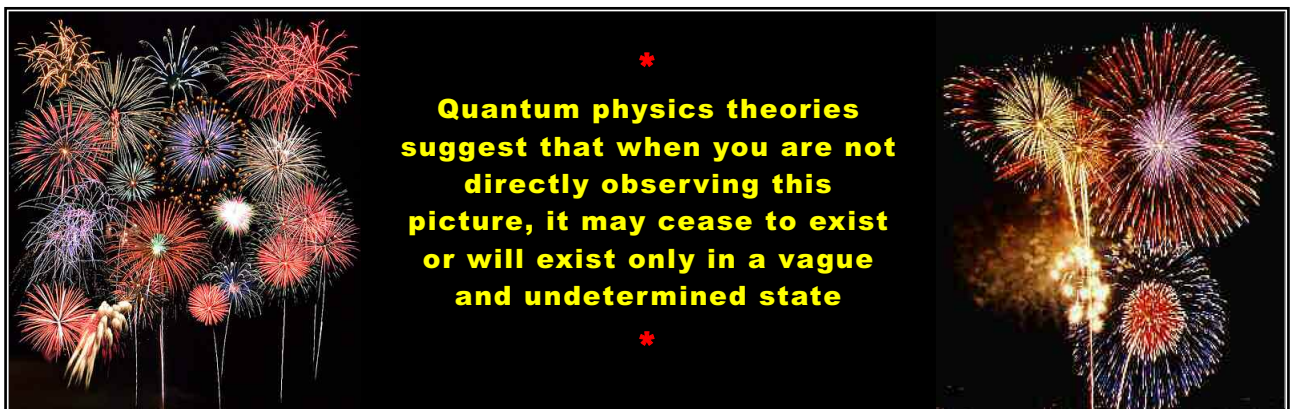
#### CONSCIOUS EVOLUTION

We have the opportunity to consciously participate in our evolution for the first time in history – to consciously evolve. Never before has a species possessed the ability to choose whether it continues to evolve toward a higher

But these conscious leaders, these more mature stand-takers will be opposing many of the present day trends and advocating new approaches. This may cause them to be branded ‘conservative’ by the liberals or ‘leftist’ by the Right Wing because they will not be wedded to a single ideology. Conscious leaders transcend left and right, conservative and liberal. They stand for a new way for us all to exist in a sustainable world *together*, focused on our commonalities not exaggerating our differences and warring with one another verbally or militaristically.

Many of these people are already speaking out and, as is often done when a paradigm change is in its beginnings, they are being shouted down. I know from personal experience over the past twenty-five years.

Some are quite young, some older, many from outside the circle of elitists or power-brokers. It takes sophisticated discernment to distinguish between the extremists who continue to drive a wedge between the warring ideologies



form or “devolve” and face possible extinction. Those who take a stand for this new truth – before it becomes more commonly held - will be the leaders who create the future we’d all prefer. This will be a future where the impact of human beings on the environment is net zero, where everyone on Earth has their basic needs met and everyone is free to pursue lives of their own choosing. This would mean a world that is environmentally sustainable, socially just and spiritually fulfilling for us all.

“Utopian,” you say? “Hogwash!” you decry?

Let me ask then: Is the state of present-day human evolution the ultimate destination for us? Is this it? Have we been put on this Earth to be busy consumers, scurrying about playing with our technologies so we may buy a bigger SUV or a new trinket or a faster computer? Is this humankind’s destiny?

If you think not, then what awaits us? Could Einstein have been right? Could we not have a different global culture if we chose to think with a new consciousness? If you think the present reality is the ultimate destiny for our species, then you are probably living life for all you can get from it. After all, if this is the End Game, why concern ourselves with making things better?

Talk of a more conscious evolution may not initially be popular because it means growing up. And we know how teenagers love being told they need to be more responsible!

and the radicals who are insisting on a way toward a future whereby all human beings continue to evolve and grow in a climate of dignity, respect and security.

#### WHERE WILL THE CONSCIOUS LEADERS COME FROM?

When paradigms change, the agents or catalysts for change rarely come from within the core of the system. The established leaders are usually so embroiled in the traditions, beliefs and priorities of the system they rarely see the need for change much less initiate it. As former US Ambassador to NATO Harlan Cleveland writes, “Those with visible responsibility for leadership are nearly always too visible to take responsibility for change<sup>2</sup>.”

Much like the emperor with no clothes, the newcomers and the outsiders are the ones who can see the truth and dare to blow the whistle. These newcomers may be smaller countries, lesser-known personalities, individuals without rank or title - people who can see dysfunction and policies that border on the insane because they have distance and objectivity. They are not mired down in the system. They have not drunk the Kool-Aid of the established paradigm or system.

Conscious leaders possess a unique combination of strengths – a powerful and informed vision for a sustainable species as well as the spiritual chutzpah to act on their vision. In contrast to traditional leaders who spend





astrophoto

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years building resumes, acquiring wealth and power, playing politics to get the titles and rank, these new leaders know the way to a better future is incredibly simple once the shackles of convention are released.

No widespread training is needed. No large budgets are required. No expert consultants need be hired. And, it doesn't require years to implement. All we have to do is change our thinking. It can happen in minutes! Changing our mindsets can be done simply by letting go of beliefs and attitudes that no longer serve us. It can happen by shifting our point of view and creating a new context for the way we think. As these new leaders point out, it is simply a sane and sensible way of living together. Once the new mindset is in place, new structures and forms follow suit, not as band-aid fixes but as re-created solutions within the new context.

Social scientist Willis Harman wrote extensively about the craziness of acting as if we were *not* connected as human beings when all the evidence (from mystics and philosophers over the centuries and now even from modern science) shows us we are all connected. Acting like we are not connected to one another is like treating your leg or arm as if it belongs to someone else!

Some leaders of conscious evolution already exist in government, business, education and most other segments of our society. But their populations are small, relatively low-profile, and widely dispersed. They exist in all levels of organizational systems. Some are independent and work as consultants. They are showing up in more and more situations, and in greater and greater numbers, around the world. They are starting to make noise.

All these thoughts are mere academic rhetoric unless there is action to back it up. So, dear reader, what about you? Are you going to continue giving legitimacy to those systems and institutions you complain about? Or are you going to begin speaking out to people who can do something to change things?

Are you ready to embark on a practice of self-discovery, to examine your life and raise your own consciousness so you are sensitive to the pulse of humanity and the power and purity of a responsible global citizenry? Are you willing to be universally responsible?

What do you see that needs to be changed? What can you do about it? Now is the time to get into action. Now is the time to take responsibility to lead the way if you possess the consciousness, the awareness and the sensitivity to what wants to be changed. The only question remaining is when do you start?

<sup>1</sup> CLEVELAND, HARLAN (2002), *Nobody in Charge*, Yossey-Bass, San Francisco.

<sup>2</sup> PAINE, THOMAS (1856), *Rights of Man*, James Watson, London. ■

# A-CAUSALITY, CONSCIOUSNESS AND ORGANISATION

WALTER BAETS



Walter R. J. Baets is a Professor of Complexity, Knowledge and Innovation; Associate Dean for Research; and MBA Director at Euromed Marseille Ecole de Management.

He is currently coordinating: the Euromed center for Knowledge Management (EcKM). Previously he was Director of Graduate Programs at Euromed Marseille. Before joining Euromed Marseille, he held the Philips Chair in Information and Communication Technology and he was director of the Nyenrode Institute for Knowledge Management and Virtual Education (NOTION) at Nyenrode Business University in the Netherlands. He has held academic positions in Belgium, France, the Netherlands and Spain. He graduated in Econometrics and Operations Research from the University of Antwerp (Belgium) and did postgraduate studies in Business Administration at Warwick Business School (UK). He was awarded a PhD from the University of Warwick in Industrial and Business Studies and a Habilitation of Paul Cezanne University, Aix-Marseille III, France.

His research interests include: Innovation and knowledge; Complexity, chaos and change; The impact of (new information) technologies on organisations; Knowledge, learning and artificial intelligence; On-line learning, work-place learning and pedagogical innovation; and A quantum interpretation of management.

<http://euromed.blogs.com>

[walter.baets@euromed-management.com](mailto:walter.baets@euromed-management.com)

## INTRODUCTION

**A**TENDENCY EMERGES IN MANAGEMENT THEORY and practice today to accept that our linear and deterministic ways of thinking about managerial problems create more problems than they solve. In the field of strategy studies, for instance, one can observe a growing interest in learning and organizational flexibility; It gives importance to distributed cognition and adaptive systems. Management theorists are keenly observing developments surrounding complexity

and chaos theory in science, and management researchers are attempting to apply emerging theories to managerial problems. The current economic reality is harsh in showing the consequences of choices that we have made over the last decade.

## → | FINGERPRINT

“Wanderer, your footprints are the path, and nothing more; Wanderer, there is no path, it is created as you walk. By walking, you make the path before you, and when you look behind you see the path which after you will not be trod again. Wanderer, there is no path, but the ripples on the waters.”

ANTONIO MACHADO

The ideas that many simple, nonlinear deterministic systems can behave in an apparently unpredictable and chaotic manner is not new. Such thinking was first introduced by the great French mathematician Henri Poincaré. Other early pioneering work in the field of chaotic dynamics is found in the mathematical literature of scientists such as, amongst others, Birkhoff, Levenson and Kolmogorov. More recently, several Nobel prizes have been awarded in this field of research, for instance to Prigogine and Kauffman.

Complexity as an emergent organisational paradigm in the knowledge based economy primarily questions the concept of causality. Despite relativity and quantum mechanics, most physics (and certainly all managerial thinking) is still Newtonian, being based on a fixed space-time frame. In the mean time, further developments have taken place in the area of biology (such as the concept of Sheldrake's morphogenetic fields) (Sheldrake, 1995) and mind/body medicine that all seem to point to a federating idea of a quantum interpretation of social phenomena (non-locality, synchronicity and

entanglement). Isn't acausality the basis for a quantum ontology of complex systems?

Once we have accepted such a quantum ontology, the concept of “mind over matter”, or the prevailing role of consciousness, becomes more obvious

This paper is an attempt to explore the essence of such a quantum ontology and its consequences for a more consciousness oriented approach to management and organisations.

## THE PHILOSOPHY OF QUANTUM MECHANICS

The foundational concepts in the complexity realm emerge from such fields as neurobiology, cognitive sciences, physics,

and organizational theory. New developments in knowledge management such as connectionist approaches (complex adaptive systems) for the visualization of emergence give promising results (Baets, 2005). In fact, instead of causality, it appears that the networked economy is rather ruled by synchronicity (appearing at the same time) as many quantum researchers suggest. Is economy and management, and in particular the more dynamic aspects of it like innovation or leadership development, indeed based on a quantum ontology?

Given the insight in complexity that we have developed over the last decade and its consequences for management the way we have discussed it in earlier work (Baets, 2006a and b), we are now ready to explore the ontological basis of complex systems, and possibly draw some far reaching conclusions on the way ahead. In the current economic turmoil, the necessary shift towards transformational leadership will have to be based on a different set of assumptions about reality.

What Prigogine and complexity theory in general discussed fundamentally was the existence of any causal relationship. In fact he was surprised that despite the two fundamental revolutions in physics in the last century, relativity theory and quantum mechanics, physics is still mainly Newtonian. It presumes a fixed time and space concept, in which the future is causally related to the past. Complexity theory shows the impossibility of this assumption, and so does quantum mechanics.

The discontinuity versus continuity dichotomy can be seen as contingently rooted in philosophical commitments and in the physical phenomena studied. By the late 19th century there were already significant, even if not overwhelming, philosophical precedents for the concept of indeterminism (including the possibility of inherent chance) in nature, as opposed to the straightforward determinism often associated with classical physics. Soren Kierkegaard believed that objective uncertainty can force one to make a leap into the unknown so that decisions cannot always 'even in principle' be based on a continuous chain of logic. For example one of Hoffding's tenets was that in life decisive events proceed through sudden 'jerks' of discontinuities, an idea incorporated into Bohr's view of atomic phenomena (Cushing, 1998).

There was a split in philosophical outlook along generational lines: the 'older' essentially classical world view of people like Einstein, Schrödinger and de Broglie versus a radically different, eventually indeterministic conception of physical processes engendered by a generally younger generation (Bohr and Born being exceptions here) including Heisenberg, Pauli, Jordan and Dirac (Polkinghorne, 1990).

On the standard or so-called Copenhagen, interpretation of quantum mechanics and, in particular, the Schrödinger equation, we no longer have event-by-event causality and particles do not follow well-defined trajectories in a space-time background. The theory predicts, in general, probabilities, not specific events.

We now come to one of the most profound issues in the interpretation of quantum mechanics – that of causality (in the sense of a specific, identifiable cause for each individual effect). Dirac (1958) observes: Causality applies only to a system that is left undisturbed. If a system is small, we cannot observe it without producing a serious disturbance and

hence we cannot expect to find any causal connexion between the results of our observations.

In this same spirit, Heisenberg too felt that, since the mathematical structure of quantum mechanics is so different from that of classical mechanics, it is not possible to interpret quantum mechanics in terms of our commonly understood notions of space and time with classical causality (Heisenberg, 1927).

We characterized the standard, or Copenhagen, view of quantum mechanics as requiring complementarity (say, wave-particle duality), inherent indeterminism at the most fundamental level of quantum phenomena and the impossibility of an event-by-event causal representation in a continuous space-time background. So, on the Copenhagen interpretation of quantum mechanics, physical processes are, at the most fundamental level, both inherently indeterministic and non-local. The ontology of classical physics is dead. The heart of the problem is the entanglement (or non-separability) of quantum states that gives rise to the measurement problem. This entanglement makes it impossible to assign independent properties to an arbitrary isolated physical system once it has interacted with another system in the past – even though these two systems are no longer interacting. The non-separability characteristic of quantum systems can be seen as an indication of the 'holistic' character of such systems.

A Bell-type theorem is proven and taken as convincing evidence that non-locality is present in quantum phenomena. Quantum mechanics has undeniably introduced us to non-locality, entanglement and synchronicity; concepts that thus far have not yet been applied in business, economics or social sciences at large.

#### THE SOCIAL SCIENCE IMPLICATIONS OF A POSSIBLE NEW ONTOLOGY

In an earlier work (Baets, 2006a), I already suggested that the solution might be, in effect, to go as low as possible on the aggregation level (human emotions, team members) to allow innovation to produce itself through the emergence processes. In fact we want to explore the quantum reality of management or any other social phenomenon. The remaining question is a double question: can, and how can, you make the concept of innovation holistic, and so encapsulate the personal emotional side? But on a deeper level we can ask ourselves this question with reference to conscience and causality, and the "seat" of consciousness.

The more on-the-ground question is: on what level can we find consciousness; is there something like a collective consciousness (for example in a company on the subject of innovation): does everyone have a sort of essential element of incorporated consciousness with a possibility of connection with others (at the level of consciousness)? Translated to companies: do consciousness, engagement, and emotions make a difference for a company? Does a company have a "soul", or a consciousness? Is there a link between this "consciousness" and the success of a company? Are vision, emotions and consciousness linked? More concretely, who determines the choice of a client who has a preference for one company rather than another? What lets potential clients make a distinction between two companies which in fact



offer the same services (for example, two big banks such as BNP and ING, or two consultant companies such as PWC and Accenture)? And finally, can we arrive at an approach, accepted as scientific, that gives at least the beginning of a response to these questions? Although these questions are, of course, a little metaphysical, this does not prevent them from being important questions. Is the current crisis a quest for a more conscious approach to management and responsibility, and are we able to think on consciousness level if we talk business? Indeed, our managerial thinking is still Marshallian, the economic thinking of the 19th Century (Arthur, 1998).

At the end of his scientific career, Wolfgang Pauli (as described in de Meijgaard, 2002) asked himself how we can know if human cultures can live with a clear distinction between knowledge and belief (an idea, moreover, of Max Planck). For this reason, according to him, societies are in trouble if new knowledge arrives and puts the classical spiritual values in question. The complete separation between the two can only be a solution in the short term, and one of facility. Pauli had predicted (and how much does reality seem to support him today) that there will be a moment in the near future when all the images and metaphors of classic religions will lose their strength of conviction for the average citizen. So we will get to a situation where classic ethical values explode and we have a period of hitherto unknown barbarism. He was touched and very interested by what he himself called “background physics”: the spontaneous appearance of quantitative concepts and images concerning the physical in fantasies and dreams. Their character was very dependent on the dreamer himself. Background physics has an archetypal origin and that leads (always, according to him) to a natural science that will work just as well with matter as with consciousness. He was also sufficiently realist to say that if a researcher in physics has observed a sub-system, the observations are as much dependent on the observer as on the instruments.

According to Pauli, the physical concept of “complementarity” physics (de Meijgaard, 2002) illustrated a profound analogy with concepts such as conscience and the unconscious. Two extreme cases which can never be attained in practice are “someone with a perfect conscience” (eastern philosophy suggests that this can be attained uniquely in death, also called Nirvana) and something like a “bigger spirit” which will never be influenced by a subjective consciousness. This “bigger spirit” is what eastern philosophy calls the “consciousness”, and western psychology calls “collective unconsciousness”. Pauli accepted that physical values, as much as archetypes, change in the eyes of the observer. Observation is the result of human consciousness.

Pauli wrote a book with Jung on this issue (1955). Where Jung talks about defined archetypes as primordial structural elements of the human psyche, Pauli introduced the

notion of the “collective unconsciousness”. They both believed that we are moving towards a joining of the psyche and the physical.

The introduction of the notion of “synchronicity” in this coauthored work would inspire many others, with the term being used by other authors in others disciplines.

Synchronicity (being united-in-time) (according to Pauli) appears in all the sciences and the techniques in which simultaneity plays a role. We must take into account that we are not speaking about a causal coherence (from cause to effect) but about a coincidence (or being together in time) that must be considered as useful even if we cannot explain the deep cause of this simultaneity. We must

remember that we always speak about synchronicity if the events concerned occur in the same time period. The concepts of statistics or the theory of probability are of another order. Probability can be calculated with mathematical methods, which is impossible when speaking about synchronicity.

Synchronicity (according to Meijgaard) is considered as the basis of a great deal of phenomena which are difficult

to explain and which are often called nonscientific. In the context of this paper, we do not go into these aspects. The way to understand this better is that the widening of consciousness and the dissolving of borders is only possible when we keep, besides our energetic causal thinking (classical), a space for synchronicity and information. It is to Pauli's great credit that he indicated the necessity to create space for the concept of synchronicity in scientific thinking. Jung speaks about this as the “a-causal” link. Sheldrake later confirmed these ideas with his theory of morphogenetic fields.

Pauli and Jung proposed that the classic triad of physics (space, time and causality) be extended with synchronicity to then form a tetrad. This fourth element works in an a-causal manner, and it is, in effect, the polar opposite of causality. Pauli and Jung believed that these oppositions were orthogonal in time and space.

The idea of an a-causal link, or non-locality, are new concepts which should contribute effectively to the science of management.

#### CONSCIOUSNESS IN COMPLEX SOCIAL SYSTEMS

One of the illustrations of this quantum concept, and with the goal of doing a thought experiment, is developed in Mitchell's “dyadic model” as he describes it in his book (Mitchell and Williams, 1996). Stated simply, the concept of non-locality is derived from quantum physics (as explained before). In fact, in the experiments he demonstrated that particles (photons) stay attached in a ‘mysterious’ manner, even if they displace in directions contrary to the speed of light.





The dyadic model is built on the idea that everything is energy. This basic energy is linked to information, what Mitchell calls structures of energy. The energy and the information form a dyad. The information, in this context, is the basis of the capacity of matter to 'know' (and so has nothing to do with information as treated in information systems).

All matter contains a sort of 'awareness' or, in other terms, a capacity to 'know'. If not, how can molecules 'know' that they must join up with others to form cells? In a subsequent state (a more complex state), it could be that in the human body/brain matter evolves such that it knows what it knows. It is therefore capable of self-reflection.

Another dyad in his model is 'awareness' and intention that equally make up part of the evolutionary process which leads to consciousness. Consciousness and innovation, accepted elements of the energy-information scheme, are the basis of self-reflective consciousness.

The non-locality is illustrated by the famous connection proven and explained in more detail before ("entanglement") between partner photons that are sent in opposite directions. They still stay, however, in a position to immediately ("instantaneously") communicate between each other over large distances. This has a relationship with the 'knowledge' of these particles. Man is equally made up of these sorts of particles.

So how does such communication function according to Mitchell? The groups of particles seem to have special characteristics of resonance and coherence that are evoked by the groups themselves. This resonance includes historical knowledge about universal matter. This idea strongly corresponds with Rupert Sheldrake's observations. The body/brain can receive holographic information in the form of virtual long wave signals. Mitchell's dyad suggests that the particles "know" by their inherent qualities of conscience and intention. The groups of particles communicate between themselves on the basis of quantum holograms (what Sheldrake calls the morphogenetic fields) that includes information about the universe. As our body/brain also works in a holographic way, it can recuperate this information. Apparently, Nature does not lose its memory concerning its own evolution. Mitchell believes that it is our intention or directional attention that links us holographically with the signals or non-local long waves.

The greater the experience of satisfaction, the more the consciousness of each cell in the body will resonate with the holographic information engraved in the "quantum zero point" (the lowest possible state of energy, in an almost resting, but not quite, situation; Polkinghorne, 1990) of the energy field. This phenomenon refers to what we know as to be 'carried along.' If Man lives in harmony with his biological rhythms (all sorts of rhythms) the body is in balance and the person will fall ill less quickly. In the material world we can witness a phenomenon of 'being carried along' if we put two pendulums beside one another. Although the

movement of the pendulums in the two clocks seems at first to be totally arbitrary, after a certain time, the movements adapt to each other and move in harmony. The two clocks are 'carried along'. In the world of medicine a lot of these ideas are found in Ayurvedic (holistic) medicine.

This quantum approach of energy, information and communication allows us to suggest causality at a much lower level of aggregation; that is to say, at a quantum level. In effect, we should really speak about synchronicity or coincidence rather than causality. It is important that it is this structure that allows people to realise what they want to realise; that could be, for example: to protect themselves against viruses, or to simply survive or to innovate, as in companies. It is therefore a question of elementary particles

(let us say the characteristics of people if we translate them into economic behaviour), which are linked in solid networks with all sorts of matter (the context), which, in turn, interact with this matter, and in doing that, become part of the wider energetic field (morphogenetics) which contains knowledge and information. When more members of a team (or a company) are 'carried along', their actions will have more success; for example,

in teams working on product innovation.

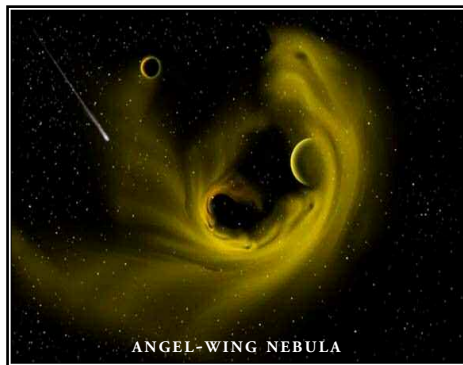
Once we relax the five basic assumptions that physics gave us on the fabric of reality: reality, locality, causality, continuity and determinism (Radin, 2006), we are able to see and develop consciousness.

#### SUSTAINABILITY

A transformational view in management or organizational theory today has to be based on the concept of sustainability. The currently prevailing definition of sustainability emphasises cross-generational equity, clearly an all-important concept for any society that wishes to endure, but one that is operationally insufficient. Anchoring an alternative definition directly to the relationship between a population and the carrying capacity of its environment (a here-and-now concept) offers some advantageous. Ben-Eli suggests the following definition:

**Sustainability:** A dynamic equilibrium in the processes of interaction between a population and the carrying capacity of an environment such that the population develops to express its full potential without adversely and irreversibly affecting the carrying capacity of the environment upon which it depends.

This definition points to the dynamic nature of sustainability as a state, a state that has to be calibrated with time, again and again, as changes occur in population numbers, or in the resources available for supporting all humans at a desired level of wellbeing. It does not seek to define specifically what such a level is, nor to limit yet unimaginable possibilities for social evolution. It recognises, however, boundaries and limits that must be maintained by stone-age tribes and industrial societies alike. As long as the



underlying conditions for equilibrium are maintained, the well-being of future generations is assured.

The set of sustainability principles that follows is grounded in Ben-Eli's definition. The principles are articulated in broad terms but can receive a specific operational meaning in relation to particular sectors of the economy, development issues, business strategies, investment guidelines, or initiatives taken by individuals. We express them in relation to the following five fundamental domains (all representing essential aspects in the interaction of human populations and the environment):

- 1 - The Spiritual Domain: Which identifies the necessary attitudinal orientation and provides the basis for ethical conduct;
- 2 - The Domain of Life: Which provides the basis for appropriate behavior in the biosphere with respect to other species;
- 3 - The Social Domain: Which provides the basis for social interactions;
- 4 - The Economic Domain: Which provides a guiding framework for creating and managing wealth;
- 5 - The Material Domain: Which constitutes the basis for regulating the flow of materials and energy that underlie existence.

The result is a set of five core principles, each with its own derived policy and operational implications. The set is fundamentally systemic in nature, meaning, that each domain affects all the others, and is affected by each in return. Rather than a list, the set should be approached and understood as a coherent whole. The framework of these principles enables a nurturing context for talking about values.

In respect to the role and necessity for consciousness in organizations, I would like to highlight only the first principle. It relates to the spiritual domain, to the basic assumptions we hold about the very nature of reality and the values we hold. It calls for recognising the fundamental mystery that underlies all existence, and the seamless continuum that links us humans, and our technology, with the rest of the biosphere, and with the outermost reaches of the cosmos. This principle means honoring the earth with its intricate ecology; fostering compassion and an ethical perspective in all human affairs; reintroducing a sense of sacredness and reverence to all interactions; linking inner transformation of individuals to transformations in the social collective; and fostering the emergence of a genuine, wise, planetary civilization. With some creativity we can see in this list a first draft of attributes to consciousness in management.

#### CONSCIOUS BUSINESS

Would it help to start even a little more a-centric? Would the culture shock be made bigger by limiting the values to consciousness-related values in line with Kofman's (2006) view that conscious business means finding your passion and expressing your essential values through your work? A conscious business seeks to promote the intelligent pursuit of happiness in all its stakeholders. It aims to produce sustainable, exceptional performance through the solidarity of its community and the dignity of each member.

Ken Wilber (in Kofman, 2006) talking about Kofman's

book 'Conscious Business: How to Build Value through Values' says that integral mastery begins with mastery of self, at an emotional level, a mental-ethical level, and a spiritual level. Anything more than that is not needed; anything less than that, is disastrous, according to him. Peter Senge, on the same book, yet highlights another important issue. The key to organisational excellence lays in transforming our practices of unilateral control into cultures of mutual learning. When people continually challenge and improve the data and assumptions upon which their map of reality is grounded, as opposed to treating their perspectives as the truth, tremendous productive energy is released.

Collins (2001) studies what drives average companies to take a quantum leap and become extraordinary. He concludes that a crucial component of greatness is a group of leaders with a paradoxical blend of personal humility and professional will. These leaders, whom Collins calls 'level 5', channel their ego ambition away from themselves into the larger goal of building a great company. Conscious employees are an organisation's most important asset; unconscious employees are its most dangerous liability. So what are conscious employees?

Kofman uses seven qualities to distinguish conscious from unconscious employees. The first three are character attributes: unconditional responsibility; essential integrity; and ontological humility. The next three are interpersonal skills: authentic communication; constructive negotiation; and impeccable coordination. The seventh quality is an enabling condition for the previous six: emotional mastery. Conscious employees take responsibility for their lives. They don't compromise human values for material success. They speak their truth and listen to others' truths with honesty and respect. They look for creative solutions to disagreements and honour their commitments impeccably. They are in touch with their emotions and express them productively.

Buckingham and Coffman report on a twenty-two year old study on organisational effectiveness. According to them, exceptional managers create a workplace in which employees emphatically answered 'yes' when asked the following questions:

- 1 - Do I know what is expected of me at work?
- 2 - Do I have the materials and equipment I need to do my work right?
- 3 - At work, do I have the opportunity to do what I do best every day?
- 4 - In the last seven days, have I received recognition or praise for doing good work?
- 5 - Does my supervisor, or someone at work, seem to care about me as a person?
- 6 - Is there someone at work who encourages my development?
- 7 - At work, do my opinions seem to count?
- 8 - Does the mission/purpose of my company make me feel my job is important?
- 9 - Are my coworkers committed to doing high-quality work?
- 10 - Do I have a best friend at work?
- 11 - In the last six months, has someone at work talked to me about my progress?

12 ~ This last year, have I had opportunities at work to learn and grow?

Kofman proposes a systemic organisational map that comes very close to our own development that is laid out in our latest book (Baets and Oldenboom, 2009). In this book we give very practical tools for managers that are interested to make the shift into transformational leadership for a more sustainable performance of the company.

Finally, Kofman illustrates the difference between unconscious and conscious attitudes through the following table.

| UNCONSCIOUS ATTITUDES      | CONSCIOUS ATTITUDES          |
|----------------------------|------------------------------|
| Unconditional Blame        | Unconditional Responsibility |
| Essential Selfishness      | Essential Integrity          |
| Ontological Arrogance      | Ontological Humility         |
| Unconscious Behaviours     | Conscious Behaviours         |
| Manipulative Communication | Authentic Communication      |
| Narcissistic Negotiation   | Constructive Negotiation     |
| Negligent Coordination     | Impeccable Coordination      |
| Unconscious Reactions      | Conscious Responses          |
| Emotional Incompetence     | Emotional Mastery            |

*A big, tough samurai once went to see a little monk. "Monk", he barked, in a voice accustomed to instant obedience, "teach me about heaven and hell!" The monk looked up at the mighty warrior and replied with utter disdain, "Teach you about heaven and hell? I couldn't teach you about anything. You're dumb. You're dirty. You're a disgrace, an embarrassment to the samurai class. Get out of my sight. I can't stand you."*

*The samurai got furious. He shook, red in the face, speechless with rage. He pulled out his sword, and prepared to slay the monk.*

*Looking straight into the samurai's eyes, the monk said softly, "That's hell." The samurai froze, realising the compassion of the monk who had risked his life to show him hell! He put down his sword and fell to his knees, filled with gratitude.*

*The monk said softly, "And that's heaven."* ZEN PARABLE

#### CONSCIOUSNESS AND MIND OVER MATTER IN ORGANISATIONS

This only presents an outline of my understanding of consciousness and organisations, and in some way the mind over matter orientation this might take. Of course, some of this is still a working hypothesis, but at the same time there is growing evidence for these theories and their appearance in real life. Essential to me is a new paradigm, a paradigm shift, in order to be or to become the transformational leaders we need, putting consciousness in the forefront of their managerial practice. This paradigm shift is based on what I call a quantum ontology, as I have tried to briefly develop in this contribution.

This ontology shifts our assumptions and beliefs into a set of other assumptions that not only allows for the defining of the role of consciousness, but also illustrates its great necessity for a different economy and society. The current crisis, unfortunately, is a hard proof of this. The point is no longer to reinvent capitalism, with or without a human face, but rather to reinvent a social fabric that is based on interconnectedness and the realisation of values, with economic value added. Some might want to call this a stakeholder economy, but yet again, this fabric needs another soul.

This new paradigm and its related managerial approach manifestly contain different aspects. Some of those aspects

we could label as more spiritual (dealing with connectedness and the inner self), as value driven, as related to awareness in action, and as giving meaning to actions.

The consequence of those choices will cause companies and organisations to develop an orientation towards sustainable performance that would be able to define a coherent answer to the crisis we observe today. Other than being based on another paradigm, another ontology, it is characterised by another performance orientation. The contemporary economy has developed a strict orientation on the short term, shareholder return, that by doing so has put itself artificially outside the necessary interconnectedness that we have referred to in this contribution. Hence there is little role for consciousness and conscious action in today's managerial paradigm.

For managers or people with responsibility that would like to make that shift themselves into conscious leaders concepts and tools are available. I gladly refer to our new book (Baets and Oldenboom, 2009) that exclusively deals with this and that gives in annex a little workbook.

"We are all linked by a fabric of unseen connections. This fabric is constantly changing and evolving. This field is directly structured and influenced by our behaviour and by our understanding" (David Bohm, quantum physicist). Hence the shift is ours to make.

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# A CALL TO CONSCIOUS EVOLUTION

## OUR MOMENT OF CHOICE

*The following «call to action» came out of a gathering of «Evolutionary Leaders» held at the Chopra Center, Carlsbad California, July 26, 2008.*

freedom, multicultural exchange, and access to communication technologies. It is nothing less than the story of our collective evolution.

### CONSCIOUS EVOLUTION

**T**HE HUMAN FAMILY IS IN THE midst of the most significant transformation of consciousness since its emergence in Africa over one hundred thousand years ago. Consciousness has been evolving for billions of years from the first cell to us. We are becoming aware that through our own consciousness the universe can know itself. This awareness reveals incredible new potential for our individual and collective humanity.

Simultaneously, we are the first species on this Earth aware that we can destroy ourselves by our own action. This may be the greatest wake-up call to the evolution of consciousness since the origin of *Homo sapiens sapiens*.

We now realize that we are affecting our own evolution by everything we do. This knowledge awakens in us the aspiration to become more conscious through subjective practices including meditation, reflection, prayer, intuition, creativity, and conscious choice making that accelerate our evolution in the direction of unity consciousness and inspire us to deeply align our collective vision.

### THE CHALLENGE

At this juncture in human history, urgent global crises challenge us to learn to live sustainably, in harmony and gratitude with one another and with the living universe. The changes required of humanity are broad, deep, and far reaching. Only by acting swiftly and creatively can we birth a planetary culture that will bring well-being to every form of life in the Earth community.

The good news is that a compelling new story of our potential as a whole human species is emerging – a story of collaboration, citizen action, dialogue and new understandings propelled by unprecedented levels of democratic

### OPPORTUNITIES FOR ACTION

We recognize that the inner and outer aspects of life evolve together. A dramatic awakening in consciousness will involve an equally dramatic shift in outward aspects of our lives. In particular, we see the following as vital opportunities for our conscious evolution, both personally and collectively:

- ✓ Cultivating A Paradigm of Aliveness: We regard the universe as deeply alive and conscious by nature. In a living universe, our sense of subtle connection and participation with life around us is the basis for a compassionate and cooperative approach to living.
- ✓ Educating for an Evolving Consciousness: Awakening consciousness is the foundation for all the change we seek to see in the world. We can work to elevate our capacity for conscious reflection and creative action in our personal lives as well as our collective lives as communities. We must support

research and educational strategies that optimize human capacities and explore the nature of consciousness.

- ✓ Restoring Ecological Balance: The balance of planetary ecosystems is fundamental to our survival. We must reverse the pollution of our global commons – the water, air and soil that nourish all life. We must encourage the proliferation of clean, renewable energy sources and expend all necessary resources toward mitigating the effects of climate change.
- ✓ Encouraging Conscious Media: We must find innovative ways to use the new electronic media as the mirror of our positive evolutionary story, investing in their capacity to reach across differences of generation, culture, religion, wealth, and gender to build a working consensus about our collective future.
- ✓ Engaging in Social and Political Transformation: More sustainable ways of living will require the support of a more conscious democracy and vibrant civil society from

### → | IN BRIEF

*“What a country calls its vital economic interests are not the things which enable its citizen to live, but the things which enable it to make war.”*

SIMONE WEIL



which more enlightened leaders will emerge. All individuals should be encouraged to use their gifts to create participatory, responsible and compassionate models of governance.

✓ Working for Integrity in Commerce: Conscious businesses that are aware of the scope, depth, and long-range impacts of their actions are key to achieving sustainability. Business must become an ethical steward of the Earth's ecology and consciously establish an economic basis for a future of equitably shared abundance.

✓ Promoting Health and Healing: The science of mind-body-spirit health has demonstrated the profound connection between the health of a whole person and the health of the system in which s/he lives. Whole systems healing, respecting both traditional knowledge and modern sciences, must be supported in physical, social, and spiritual domains.

✓ Building Global Community: The new story is about all of us who share this planet. Together, we can create a culture of peace that eliminates the need for armed conflict, respecting and appreciating the glorious diversity of our human family.

YOUR PARTICIPATION IS VITAL

Our group has done its best to articulate possibilities for the evolution of consciousness at this crucial moment in time. Please reflect on this document, feel what resonates in your being and calls forth a response on your part. We invite you to discuss it with others, continuing this global conversation by adding to it the wisdom that is uniquely your own.

Together, let us co-create a new narrative of conscious evolution that is a call to individual and collective action, birthing the most significant transformation of consciousness in history.

If you would like to sign on to this statement please visit [www.consciouscollaboratory.net](http://www.consciouscollaboratory.net) .



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NL-2517 AN THE HAGUE  
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T. +31 (0) 70 362 6523  
F. +31 (0) 70 362 9848  
E. [NEWSLETTER@SPANDA.ORG](mailto:NEWSLETTER@SPANDA.ORG)  
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