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COLLECTIVE ENLIGHTENMENT

EDITED BY
SAHLAN MOMO

SPANDA

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CONTENT

LETTER TO THE EDITOR IV
SUSANNE COOK-GREUTER

EDITORIAL - SAHLAN MOMO V
Benighted, Enlightened, and Delighted

INTERVIEW - JOANNA MACY XI
Learning to See in the Darkness amid Catasrophe

ERVIN LÁSZLÓ 1
The Evolution of our Consciousness Is the Enlightenment of Humanity

DUANE ELGIN 5
Humanity's Journey Home: We are Learning to Live in a Living Universe

GEORGE PÓR 15
On the Verge of Collective Awakening

PETER RUSSELL 31
Blind Spot: The Unforeseen End of Accelerating Change

DEEPAK CHOPRA 43
A Critical Issue: What to do when Darkness Rises?

TOM ATLEE ~ ROSA ZUBIZARRETA 45
The Embodiment of Wholeness in our Social Order: Our Evolutionary Challenge as Humans

TERRI O'FALLON 57
The Integration of Awareness with the Individual and the Collective

ALLAN COMBS 63
Collective Enlightenment

RICHARD BARRETT 69
The Ego-Soul Dynamics of Enlightenment

THOMAS HÜBL ~ JULIE JORDAN AVRITT 75
Toward the Integration of Collective Trauma in a Time of Exponential Change

MICHEL BAUWENS ~ EDWARD BERGE 85
Collective Enlightenment through Postmetaphysical Eyes

ZACHARY STEIN ~ MARC GAFNI 93
The Apocalypse of the Modern World-System & Related Possibilities for Democratizing Enlightenment

MARIYA K. KARAGYOZOVA 103
Collective Enlightenment – The Ascent

JOHN E. STEWART 107
Enlightenment and the Evolution of the Material World

FRED MATSER 115
My Process of De-veloping Awareness: From a Finite Understanding towards Glimpses of Infinity

GREGORY WILPERT 123
Consciousness for the Post-Capitalist Commons: A Developmental Psychological Perspective

ROGER D. NELSON 131
Shifting Global Consciousness to Global Awareness

ERIC REYNOLDS 137
Next Stage Organizations

ALFONSO MONTUORI 147
The Evolution of Creativity and the Creativity of Evolution

GEOFF FITCH 159
Truthfulness and Collective Enlightenment

CHARLES JOHNSTON 165
Bringing Wisdom to the Future: Creative Systems Theory's Concept of "Cultural Maturity"

JIM ROUGH 175
The ToBe Project. How to Facilitate all of us to Come Together as We the People

BRUCE H. LIPTON 183
An Introduction to Conscious Evolution: a Theory we Can Thrive With

ABSTRACTS :: SUMMARIES 193

INDEX BY AUTHORS VOLS. I-VII 201

UP NEXT

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BACK NUMBERS

SPANDA.ORG/PUBLICATIONS

1 | I, 1. 2007 Multicultural Youth
2 | I, 2. 2007 Water-Wise
3 | I, 3. 2007 Gender
4 | I, 4. 2007 Death Penalty
5 | II, 1. 2008 Hunger. A Clima(c)tic Perspective
6 | II, 2. 2008 Education & Development. Africa
7 | II, 3. 2008 Indigenous Knowledge (IK) & Environment
8 | II, 4. 2008 Consciousness & Development
9 | III, 1. 2009 Human Rights & Security
10 | I, 1. 2010 Energy & Development
11 | I, 2. 2010 Microfinance
12 | II, 1. 2011 The Placebo Effect
13 | II, 2. 2011 Indigenous Culture & Development
14 | III, 1. 2012 Consciousness & Development 2.0
15 | IV, 1. 2013 Anarchy & Nonprofit. An Emerging Affair
16 | V, 1. 2014 Innovation & Human Development
17 | V, 2. 2014 Collective Intelligence
18 | VI, 1. 2015 Systemic Change
19 | VI, 2. 2015 Creativity & Collective Enlightenment
20 | VII, 1. 2017 Collective Enlightenment

CAPTIONS

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LETTER TO THE EDITOR

Dear Spanda,

Thanks for considering my views about emergence and a tipping point for humanity. It would be wonderful.

And in my view such ideas are mostly based on an unproven yet hope-laden spiritual escape from what is. Of course the denial of death is based on fundamental frailty of our existence and defending ourselves against the reality of non-being is very, very human. I just don't know. Any projections into the future seem speculations to me. Believing in a great future is perhaps necessary because looking at life and death realistically is just too painful for a conscious being.

Rather than facing individual death and human species extinction, we can fantasize about being redeemed as a species. We can tell and believe in ancient stories about humans actively participating in the universe becoming conscious of itself. Well, from my perspective our existence could just as easily be a totally random affair. Our demise following a cycle of large scale cataclysmic events that we have observed. Whole galaxies get born and destroyed. We are the first species on earth that has managed to undermine the existence of the whole planet with its activities, many based on our fundamental *hybris* about our superiority and specialness.

It's 72 years since Hiroshima. It's another almost 30 since many of us suffered from nuclear despair with Joanna Macy its then powerful and positive voice. While there was some hope to curb the proliferation back then, now the danger of nuclear annihilation is a thousand-fold greater. Some nationalistic society or irresponsible immature person can snuff out every living thing on our little planet with the push of a button. Just the existing buried nuclear waste alone will eventually poison the ground we stand on. So far I am haven't even mentioned the many other threats to our survival: global warming; deadly poisons in the air, the ground and oceans; overpopulation and extremes of income disparity etc. the list is long.

PBS recently aired a biography of Carson and her *Silent Spring*. Her message is more urgent than ever. Yet we elected a government in which still many of the decision makers deny the realities of the Anthropocene, deny our global interdependence as a species. Denial is rampant and... deadly. Selfish aggrandizement and short-term gain seems still to trump long-term considerations about our activities. Most of the world is not integral or believing in soon to emerge transformation of human consciousness. It's mostly still about the idea of survival of the fittest (read wealthiest, and most powerful with the biggest weapons) and minimal self-awareness. "Me against everybody" "us against them" thinking that denigrates and makes anyone an enemy who is not like me. or us. An enemy that needs to be extirpated, annihilated. The fear of our own insignificance and potential annihilation projected outward. An interpretation, to be sure, but just as realistic as proposing a new world.

Don't get me started. You see why I did not initially respond to your invitation. There are some who can speak my voice even better. While I am part of the integral movement and I do my best to alleviate suffering in the small ways I can, I also find it more and more a social responsibility to speak up about and face the unimaginable horror of annihilation. I don't wish to hang on to hopeful ideas of redemption and consciousness transformation. I want to face the inevitable with an open-mind, and heart. Can I lead a meaningful life, with some wisdom and compassion facing existence through that lens of inevitable death, both as an individual and as a member of this species whose long-term survival is already most unlikely. The most heart-wrenching part is not being able to communicate a hopeful message about the better tomorrow to my own grandbabies and future generations across the globe.

I wrote this spontaneously wanting to respond, but feeling Spanda attracts company where my less positive reflections may not count much especially since the other proponents seem invested in spreading their view of a new wholeness. I am tempted to say promising a new kingdom where our own god-hood outshines all past evil. I am aware that I am spouting what many can discard as nonsense or the rantings and railings of an old curmudgeon.

The cycles of life and death are real. Nature and the universe are not "kind," but demonstrates their own wisdom to us. We humans have been the spoilers of our own nest – and we relentlessly continue on the destructive path. No exit.

With tender hope for mercy and justice, love and compassion for us all.

Susanne Cook-Greuter, January 2017

BENIGHTED, ENLIGHTENED, AND DELIGHTED

THIS ISSUE IS DEDICATED TO FRIENDS AND COLLEAGUES whom in many ways have enlightened this mor[t]al life, and to all who are awaiting around the corner to step up and move on ;-).

So far so good.

As anticipated (vol. VI, 2), a continuation are here presented the varied facets of a topic very dear to us, a contribution to deepen its understanding, appreciation and implementation. Some of the authors' views are experiential, other theoretical, some other methodological, all taken from different angles and perspectives, embodying and witnessing humankind transmuting into a further evolutionary tier, stage, level. Their visions are collected as complementary to a global phenomenon gaining momentum, and as an invite to take action. Consciousness is becoming self-aware, engaged in the process of collective self-enlightenment, allegedly enacted by empathic resonance.

Let's be clear, to unfold the different aspects of such a complex matter it's indeed to increase consciousness itself, yet, to be conscious actors of change and collectively innerve the shift, quality-action is required. Leaving momentarily aside the bearing of Will and Freewill in the process, the questio *of how to attain such quality lays open to suggestions.*

We are dealing here not only with individual acts overpowering the historical time, but as well with a human collective accomplishment bounding and rebounding at all levels, across time and tiers, beyond space and quadrants, or whatever words and schemata we choose to use here.

The content of the issue is presented in two consecutive sections, with just a soft hiatus in between, signalling the subtle transition from the experiential and theoretical level to the implementation of result-oriented endeavours and devices, as both aspects are the essential components of an act conveying and shaping reality in both worlds, which are actually but one.

So here comes my take.

♦ ♦ ♦

Only by stopping
the process of
thinking and imagining
can a person receive
something from beyond
his reach,
that at length attracts a
vibration of energy
felt within the self.
At that moment he will also
fell powerless,
but with no sense of loss,
and fully conscious.

PAK SUBUH

♦

We are not
human beings having
a spiritual experience;
we are spiritual beings having
a human experience.

TEILHARD DE CHARDIN

BENIGHTED, ENLIGHTENED, and DELIGHTED, three indivisible friends of old are strolling uphill along the narrow path of consciousness, constantly in danger of flip-flopping over the edge. Emerging from different walks of life converging unto the path, equipped with a handful of elemental tools and endowed with sincerity, patience and submission, each of them is carrying a burdensome backpack loaded with tribulations, memories, hopes, scars, love, joys, wonders, and all the usual luggage of a pursued vision. Time after time falling on their knees and recovering anew, at every occasion reinventing their selves, lead by a throbbing consciousness heading to its becoming across the crystal path. Now and again unloading their shoulders, fine-tuning and refreshing energies at the refuges scattered along the slope. A sort of individual-collective transitional enlightenment is awakening the altitudes of their spiritual-material quest reverberating in their being: brief, a life within Life.

At both side of the path, seemingly shortcuts are promising illusory powers, fantasy's sanctuaries of hope, in which multivoids are playing conflating ego-games.

Yeaah, yeah, yah… nice words yours, a real thrill! — *said B* —, but on which ground are you assessing all this? Can you prove it? Verify and replicate it? By resonance? C'mon! The 'scientific' evidence failed long ago, severing contact with the whole by perceiving reality with just one eye, with the 'material' take, side, look, vision. I don't' buy it! To gain a far-reaching inclusive perception integrating both ends, at least 'two' eyes are needed and, more often than not, even two are barely enough... right?

Very much so — *said E,* — as already the Renaissance, well grounded in Classicism *&* Utopia, in alchemy *&* kabbalah, crafted a perspecive optical illusion of the inner perceptual space, not only at the level of the physical eye, but also at its macro altitude, the organ and its function. Time is a construct of the thinking mind flattering matter to one single dimension, unapt to perceive frequencies finer than thought. A

binocular vision cannot perceive both worlds, a deeper sight beholding the two polarities in a single act, a third eye, is needed to disclose the unseen in which we all are part and particles of a whole equation, a null, a void, in becoming, still.

True — *said D with a smile,* — an organ of perception coupling the polar vision beyond the spacetime continuum would definitely be very useful today. The diaphragm, the *bazrakh* holding the vision apart is giving way to an ephemeral manifestation, the collective awakening of humankind's third eye of which so fondly you are talking about, or the ongoing collective enlightenment throughout the entire range of human resonance… yes, sure, very interesting, it sounds all good, I definitely agree… well, actually, indeed I'm delighted — *doubled down D.*

Take it easy, take it easy, my dear friend — *said E,* —
post-ideological, post-spiritual, and post-integral,
the South-wind unwinds them all,
yet it cannot dig you out of me.
Eradicating high, flourishing deep
the lotus of delight is bowing to Thee,
unpolished, unbalanced by your absence,
in full bliss.
Neither your soul nor mine can accomplish this journey alone.
It's at midnight-sun that I miss you most.

As caught by a rapture, D starts whirling on his toe while uttering fine air:

Beware! A mesoterical field is implementing the spiritual-material continuum!
Transmissibility and empathic resonance,
and what else?
Mobility & liquidity are waging fake coins.
A profitable industry of nonsense invaded the inner court,
leaving behind dispersed slippering limes.
A grace-time to ease away the hakes of life,
the probable time of notime ashesing the day.
Yet, it's the midnight-moon I miss most.

B — Ok, ok! Stop it now! You called for it!
Esotericism and essotericsim are both gone,
the mesotime in between is picking up.
Stylized by a hobo,
touching the lower brim of the contracting phase,
bound to transmute in its opposite,
a compartmental phenomena decanted *d'antan*…

E — Think twice! This is a contagious issue, don't get trapped in the outer shell, scope further, beneath, above and betwixt the surface, warp its multicoloured threads linking people and events, weft them at the source and start weaving the fabric of life. Pause. Take breath and move on, with wisdom and knowledge, unfolding the imploding one.

Nonsense, rubbish! You are mad! — *said B* — You don't have the slightest idea of what you are talking about! Truth no longer holds to the attracting source. Post-metaphysics? Have wisdom? What? Humankind is in a transiting zone, halfway between the spiritual and the material boroughs, transmuting ordinary consciousness to its spiritual-material realization, heading to a collective *we-wei, karma-marga*, action-non-action. These are daunting times of global confusion in which keeping the helm firm on the attractor asks for unmapped skills, as the function is shaping and becoming the organ, embodying the invisible, interconnecting people & events in a subtle intra-being web, of which, by the bye, the internet is its symptomatic complement. Yet, linked by the inner, humans are taking awareness on their own accord, and awaken souls are envisioning a collective paradigm shift in consciousness, contemplating further levels of being. Deeper than feelings there is more: there is Being, with all functions well aligned with *dharma*.

Immersed as they were in such revelling, almost unnoticeably they reached the third refuge on the path, to finally rest. The single room of the shelter is almost empty: three sober cots only, aligned in the centre; at their heads, abutting the farther wall, an old wardrobe with one skeleton inside. No optional.

Outside/Sunset. In the backyard of the shelter.

B and E are straddled on a metal teeter-totter tilting and dangling in the purple evening breeze swiping from the overlooking gorge in penumbra down hill. They envision opposite innerscapes, constantly slanting up and down from different state of consciousness accordingly to their assumed position in space. Only when they are at the same height, in balance, partaking the same plane, are they able to communicate.

Meanwhile, D is walking around, at time looking at them out of the corner of an inquisitive eye, all along revolving in memory last night dream, time and again uttering nonsense to recall-up their minds – a sub-narrative topos, a well familiar behavioural pattern among them.

E — Do you know what? Chance doesn't exist. Chance are the subtitle invisible threads uniting people and things unnoticed to the untrained eye.

B — Please… spare me, I'm still half asleep, just waking up from being awake all night, my consciousness is at uncanning standstill, preventing release. Art is an agglomerate of dynamic tensions at rest in a shaky equilibrium before transmuting into a text, an *ur*, *meta, para* text, *Para-para & Paraculo*, a smartass pair offering free parties with no food to chew. My ordinary conscious needs to be triggered, initiated, aroused by a confident vibe chasing and overtaking all limits…

E — A function of the sensitive centre enforced by the higher emotional centre I suppose, to use an obsolete terminology, as now all centres are aligning, enabling the flow across levels and fields. To change or not to change? Severing the Gordian knot to breed a joyful stream funnelling both spirit and matter? Bottom-up and top-down at the same time, meeting halfway in the soul to embodying a middle outcome? Grace? Who knows?

The new Moon is waxing. Provisions are scarce, no meal for the eve, involuntarily fasting from the abundance of spiritual food in their bags. Getting closer and closer, deeper and boarder, gradually attaining a graceful gait — slightly off-topic, yet relevant ;-) — in purifying the inner room to allow growth. Sustainable and durable development of the being, no collective enlightenment without individual awakening, were their thoughts just before falling asleep. The darker the night the brighter the stars, and the brighter the light the darker is the shadow.
Reclining on the cot,

E — We are still dealing with the one-end gross effect of shifting to the collective, where the request for a global sustainable development is but the reflection upon the mundane plane of the self-enlightening consciousness of Mother Earth, a being as well, and of Sister Death. Unavoidable.

D — Lo and behold! Consciousness is becoming aware of itself! It's getting self-aware! The planet is becoming aware of itself! Humankind is becoming self-aware, individuals are becoming aware of their Selves, and a subtle vibration of life within life is surfacing at sight: open the eye! And… it's already gone! Clog off sister! Be serious, that's a trick…

At dawn they are already on the move, climbing, loosely abiding to the path's guidelines revised according historical time but firm on the source, timely discovering novel operative modalities, at risk of faux-pas and oher subtle threats to overcome. The dark night is drifting apart, the sky is turning lighter and lighter and taking on a golden reverberations on the horizon, the oxygen is getting finer and finer, burnishing and refining body & soul's brightness, the thinking mind evaporates, feelings and emotions are at bay, as in wait.

Now, just to fill up the measure — *said D,* — in a phase when a backward short-sighted outlook strives to revive the debris of a spent time recovering mundane spectra, we are here breathing a beautiful globalised small world, where two is absorbed unto one, bending from a selfish centripetal urge to an altruistic expansive drive, from I to We, as the saying goes by.

Polisense and palingenesis — *said B,* — you really enjoy playing with words, distilling meaningless lessons and going pontifical! Or political? *Ponti facere* in Politics are shared acts issued by a *polis*, by a community, by the collective… if so, why so many conflicts are still around? Let's skip the techno-globalising debate for now, as the solution could arise only from an inner-outer equation. People innerly in peace hardly fight. Yet we are forcefully mingling with a dual response. Even though everybody and every soul knows that Reality is one, manifested through multifaceted reflections across the whole range of frequencies up & down beteween the improbable limits of its double plane of manifestation — you and me, — yet You & Me are We, one, not Thou nor Thee, but *Thwe*. By the way, who is going to heal Barkala and get some peace to move on? Who will reform the dysfunctional Security Council clad in post-war rhetoric, unable to deliver, tamed as it is by egotic quanta entanglements fostering bridled confusion? Who? Who? Tell me who!? You? You who seems to know all and everything? Collective enlightenment and all your fetish blah blah, yes, very fine nice words, postulating a shared responsibility to deepen and broader intra-being, linking being to being, and being to ideas and things; *bhavanga-sota, bhavanga-citta*, and *tikkum olam* all along the way, short of anything better this time around.

E — The thing is that collective enlightenment is a reflection of its parallel co-emanation from the meta-social plane, that our split reality too often hinders it from consciously enacting its arrive. That's a concern, no doubt, but how to act in co-awareness as shareholders of Unity, and advance a common currency for the whole planet?

B — You talk a lot but hardly score any point. What's wrong with you? Energy transition at all levels, from carbon to solar and finer, without depleting the planet and the soul. Vitalising anentropy in leaping to a compassionate common dimension. Diegesis and mimesis no longer abide here, they left this narration to explore new realms, and your whole text is now mixed-up in unlevelled fashion.

D — Although nobody should outshine the bride, nonetheless we are exploring dimensions, disclosing and secreting *secreta* along the path, embodying wisdom, transcribing metaphysical knowledge into roughly coherent system of signs, in a *langue* at times rendered by graphemes of sefirothic tetraktys. When the mesoteric realm permeates all directions, past and future on the present plane, are gone. You know? It happens that consciousness reverberates synchronically on all altitudes: from the subtlest 'mundane' physiological counterpart to the grossest gibberish you would here address to corroborate your cosmic paradigm at all levels of reference, manifestation, or emanation. Are you happy with this?

Grounded in personal clinical findings and sheer drivel, they finally reached the fourth oasis to rest and repair.

E — Didn't somebody maintain that the Shahan-shah of notime will shine in due time? That a higher and deeper shared awareness is approaching, gradually taking hold by consuming itself in its own *élan*? And didn't some other soul support the claim? Certainly yes, but those were other times, incomparable by definition. Yet, to define it is to set limits to the thinking linear pace, preventing its going wild, anchoring thought into matter as, at the end of the day, both share the same coarse energy.

B — Yes, agreed. I'm familiar with that literature and I think there is much truth in it, but those are past century's views, the outcome of a previous era, predicaments shaped by the perception of an age and, as you well know, understanding can only be grasped by the corresponding consciousness level of that epoch, a *Geist a là carte*, so to say.

D — I'm with you, it's a most respectable vision, but what about the function of the sexual centre in all this enlightenment so fervently descanted by you? Tantra? and all the rest? I would enjoy having the cake and eating it too, even though only at high tea… see what I mean?

E — Next time, next time, be patient, we will see, as usual we are negotiating nonsense...

D — Fine with me, I hope I can make it across the boarder, just let me know, so to get aquatinted with the presence, it will probably take a few more decades before the first part of all this will be set in place, and then it will be already time to change perspective… or no perspective at all?

They were semi-asleep, half-aware, unable of grasping the full meaning of the procession of visions unfolding upon the three of the four walls of the refuge:

~ on the left side, on a fact-finding mission downhill, a double line of cypresses is communicating the need to be embraced in the stance; a short exchange, and it's all done;

~ on the right, a cupola is crossfading into a mosque dome, the dome into a golden cupola, then into a stupa, and return, back and forth, further and farther without solution of continuity;

~ in the middle, on the wall facing East, a Cherubim facing West. Huge, tall, in rich glided luminous garments, in a Middle-Age fashion — Angelico, with some Parmigianino addeing, would I say. The golden aura is made of infinitesimal whirling points decreasing to the centre on the back of the head, the usual iconography, but wait… just a sec, something is moving, it's smiling! — or is she? Leonardo knows better ;-); a long interchange, and it's all over.

Early morning/On the slope.

After such a disquieting night, they are finally approaching the end of their journey by reaching the fifth refuge on the peak. Empty. Nothing inside to lean on, and anything to do more. Thus, enjoying the last speck of time, they enact an untamed dance, murmuring incompressible words, sparse verses unfolding in a choral to their beloved.

Today
no debris to dispose,
zero-waste was the mantra
evoking eternity beyond heaven's ache,
no shit to dig out from the universal throb:
our dalliance in both worlds was karma-free.
A fallen cherub stranded on the plan of symmetry
is rescuing migrating souls from human traffickers
enchained to a future loaded by a mouldy past.
Deprived of the right to be and not to appear,
it turned Yggdrasil's into a Möbius strip,
casted the roots of a slaved passion
behind the bars of freewill
beached on a furtive land.
« You! »
— howled the herdsman to the scapegoat tribe —
« you, the pontifex fuelling subtle food into my groin,
weaving gossamer lies under the bay of hope,
hijacking *spes* for *nunc* and *nudius* for *hic*,
you brought to an end the gliding dove
beneath the bush!
You, the artifex of joy,
lilting your breasts above my pose,
pursuing death in perusing life,
feeding gross stuff into my cry
impinged by a drivel tautology
devouring the last harbinger
inhaling the day of doom
exhaling a night of boon. »

From the crown of the mount they contemplate the vast scenery round and round, imprinting in spirit their last oversights. Then, hand in hand, voicing a ballad on a music of the sphere base, more immortal than mortal, as one self only, they glide downward the opposite side of the mount-slope and, at long last, ground at the cervix foot of the cosmic womb, to eventually implement quality-actions innerving the evolutionary stage, hopefully embodying the last 'chance' for enlightenment and moksha.

Web of inter-being
taking-on awareness destination,
cleansing perception to release infinity,
getting used to good many years decided *ad hoc*,
stump-graved fingerprints on the soul,

— legend has it as imperishable —
meet the fixers in a vegan steam-club,
pensive.
A massive feat of engineer pushing the way through,
getting along on the bottom line
— this might do,
someone somewhere is going to love it,
I think I'm doing all right —
down to the pointless point:
end-off the last ride,
prying the uncovered next,
a critical turn of expectations;
and in spewing ashes across the aisle,
made the case.
Best of luck with that,
get a handle on it,
crack the code,
open the eye,
and it's a all over.
Who wouldn't' think that's impressive?

♦ ♦ ♦

As it would already be noted, this is but a blurb of an unlikely uncharted transition, not the account from the harbour; merely one of the many descriptive doable traces of an itinerary collectively being dug in historical furrows, synchronous on all planes of the being, and yonder. A meagre display testing the authority of a texts scoring events in sensible words ahead of all wor[l]ds, as sacred language properly convened, to plainly foster a higher and deeper individual-collective state of consciousness. It may not spur ex-abrupto *a spark of radiance into consciousness, but might confidentially favour a wider perspective on the topic, seasoning of a pinch the inner-outer outlook on our spiritual-material affairs. Or may be not.*

Enjoy a challenging enlightening issue ;-).

⊙ ♦ ⊙

CORNELIS BELLEKIN (1650 -1700), *Carved Nautilus shell.*
Rijksmuseum, Amsterdam.

JOANNA MACY

LEARNING TO SEE IN THE DARKNESS

AMID CATASTROPE

AN INTERVIEWE BY DAHAR JAMAIL*

Eco-philosopher Joanna Macy, Ph.D., is a scholar of Buddhism, general systems theory and deep ecology. A respected voice in the movements for peace, justice and ecology, she interweaves her scholarship with five decades of activism. As the root teacher of the Work That Reconnects, she has created a ground-breaking theoretical framework for personal and social change, as well as a powerful workshop methodology for its application.

Dahr Jamail, a Truthout *staff reporter, is the author of* The Will to Resist: Soldiers Who Refuse to Fight in Iraq and Afghanistan *(2009), and* Beyond the Green Zone: Dispatches From an Unembedded Journalist in Occupied Iraq *(2007). Jamail reported from Iraq for more than a year, as well as from Lebanon, Syria, Jordan and Turkey over the last 10 years, and has won the* Martha Gellhorn Award for Investigative Journalism, *among other awards.*

DAHR JAMAIL – WHAT IS CALLED OF US NOW, from the planet? What are we being called to do at this time?

JOANNA MACY – To wake up together. That is actually the name of the movement in Sri Lanka that I went over to do field work with. Sarvodaya. Taking the Gandhian term, but using it in a slightly different way, but the same Sanskrit, which is "everybody wakes up together."

It's hard to wake up alone now. It's scary to see even what is going on. But there is almost no limit, I've come to believe, to what we can do with the love and support of each other. There is almost no limit to what we can do *for the sake of each other*. This taps into the Bodhisattva heart. That's that hero figure of Mahayana Buddhism, "the one with the boundless heart." The one who realizes there is no private salvation.

If you are going to wake up, you have to wake up together. Never has that been more true than now, at this stage of late stage corporate capitalism.

There is a huge force, through the media, through the banking system, through these people and corporations that are locked in runaway system that is very hard for them to stop now. Because once you create something, an economic system or being or contraption that *has* to keep making more money, it is *forced* to do that. It is *forced* into these extractive industries, and the mining. Even the nicest people are caught up in this. These are super-human forces and principalities, and so many are trapped in it. Those who appear to be our enemies, they are just flesh and blood who are also trapped by this economic system. And it's good for that system to keep making nuclear bombs. It had President Barack Obama over a barrel. He was caught in that system before he walked into the White House as president. And his first act had to do with more permission being given to Wall Street.

So that can give us compassion for each other. And we don't have to waste time being scared of each other. We can see each other as captives of a force that's got us all by the throat. But we can stop it. We have to help each other wake up to how we are destroying *everything we love*, before we are turned into robotic instruments of these inhuman systems. Just by their own logic, it is pretty simple to see.

It's going to be beautiful to see what we dare to do. Facing our fears, and letting go of and getting over our knee-jerk reactions to what we think we don't like, or are afraid of. To see our capacity to walk into the fire. To discover how much we really love being alive. To give ourselves a taste of what that passion is. To let us fall really in love with our planet, and its beauty, and to see that in ourselves, as well as in each other.

The inhuman economic machine does not love us back. It makes us into robots. It sucks us into the destruction of all that is. And even if we can't turn it around now, *at least* we can wake up, so that in the time that is left we can discover who we are, just looking into each other's eyes. Just looking into the face of the moon at night, or the trees, or the faces of our children and free ourselves. I think we want that.

We can do that, we are capable of that, and that is what I see happening. I know that is possible, because I see it. Because it's happened to me, and countless of my brothers and sisters. They don't have to do the Work That Reconnects, they just have to fall in love with life, and there are many ways that people are doing that.

And as you do, you find that you are not alone here. We not only have each other, but we have the ancestors. And we have the future ones. And that is the truth. The ancestors are with us because their blood flows in our veins. They made us. We wouldn't be here without them. Every single one of them, back through time, carried us like a seed. They are here. And they are worried sick about us.

And the future ones – we carry the future in us. And the future ones and the ancestors, I feel they surround us at times, as witnesses. And if we open our heart-minds to them, they can give us guidance and strength and strength in our hearts. Because it helps us realize how big we are. We are bigger than the balance sheets of the mega-corporations. But the mega-corporations are not real. *We are real!*

Jamail – People are starting to take radical actions – the resistance at Standing Rock, people chaining themselves to railroad tracks to block coal trains, etc. – valiant acts of resistance – yet much of mainstream society still has not joined with these movements. Talk about that disparity, and that phenomenon.

Macy – There again is the betrayal from the media. Fox News and all the others are made to do what they do, skewering the truth as they do.

These people who take these valiant actions to help the Earth, they call to me at the center of my soul. They are the cutting edge of human evolution. They have broken free from being captives of the hyper-individualism of our culture. They are no longer held captive by their lonely ego winning out over other people. They are no longer held captive by a shrunken ego.

And to me, there is nothing more beautiful. I see beauty in them. Such great moral beauty. They are aflame with meaning. They are like beacons. They are saying, "Don't let it get the best of you. This is just hardware! This is just cement and steel! Don't let this cow you. See, watch! I'm not afraid. I'm going to do it. I'm going to lock myself down…. But see! See how it is to be free!"

That's what I hear them saying to the psyche. I think there is nothing more beautiful. They are showing us what we can be. That we can spring free, and walk out of the prison cell of the separate ego and find our true nature in our inter-woven-ness in the web of life.

Oh, that just blows my mind it is so beautiful! It makes me so glad to be alive!

⊙ ♦ ⊙

* *Excerpted from an interview by Dahr Jamail, in* Truthout, *read the full interview here* < http://bit.ly/2ti2RaH >.

ERVIN LÁSZLÓ

THE EVOLUTION OF OUR CONSCIOUSNESS IS THE ENLIGHTENMENT OF HUMANITY

Ervin László is a philosopher of science, systems theorist, integral theorist, originally a classical pianist. He is an advocate of the theory of quantum consciousness. Ervin is Director of the Laszlo New Paradigm Leadership Center (Italy), Founder and President of The Club of Budapest, Founder/Co-Director of the Ervin Laszlo institute for Advanced Study (Denmark), Fellow of the World Academy of Arts and Sciences, Member of the Hungarian Academy of Science, the International Academy of Philosophy of Science, Senator of the International Medici Academy, and Editor of the international periodical World Futures: The Journal of New Paradigm Research. *Laszlo is the recipient of the Goi Peace Prize (2002), the International Mandir of Peace Prize (2005), the Conacreis Holistic Culture Prize (2009), the Ethics Prize of Milano (2014) and was nominated for the Nobel Peace Prize in 2004 and 2005. He was awarded Honorary Ph. D's from the United States, Canada, Finland, and Hungary. Laszlo is the author or co-author of fifty-four books translated into twenty-four languages.*

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ERWIN SCHRÖDINGER WROTE "TO DIVIDE OR multiply consciousness is something meaningless. In all the world, there is no kind of framework within which we can find consciousness in the plural; this is simply something we construct because of the spatio-temporal plurality of individuals, but it is a false construction […] In truth, there is only one mind."

Wise words, now echoed by findings at the leading edge of consciousness research. They raise a fundamental issue. If there is only one mind in the world, that mind is common to all people with consciousness. The one mind is their shared consciousness. Then the evolution of the individual mind is also the evolution of humanity's collective consciousness.

A PERENNIAL QUESTION

In the last count it is true that all we know of the world is our consciousness. But it is also true that we do not know what is our consciousness. Is it something generated by our brain, or something that exists in the world and is only decoded or transmitted by our brain? Are we a body that generates a stream of sensations we call consciousness, or are we a consciousness that is connected with a body that displays it? Consciousness could be a kind of illusion, a set of sensations produced by the workings of the brain. But it could also be that our body is a transmitter of consciousness, and consciousness is part of the reality of the world. The world could be material, and mind would be an illusion. Or the world could be consciousness, and the materiality of the world would be the illusion[1].

RE-DISCOVERING THE ANSWER

Both of these possibilities have been explored in the history of philosophy, science, and spirituality. Today we are a step closer to understanding which of them is true. On the basis of a growing series of observations and experiments, a new consensus is emerging. It is that "my" consciousness is not just *my* consciousness – any more than a program transmitted over the air would be the program *of* that TV set. Consciousness is an element in the real world. My brain and body do not produce it; they only display it. My consciousness is a reflection, projection, or manifestation of the consciousness that exists the world.

Mystics and shamans have known this for millennia, and artists and spiritual people know it to this day. Its re-discovery in the domain of science augurs a profound shift in our view of the world. It overcomes the reductionist answer materialist science gave to the question regarding the nature of mind: the answer according to which mind is an epiphenomenon, a by-product of the workings of the brain. In that case the brain is like an electricity-generating turbine. The turbine is material, while the current it generates is not. In the same way the brain is material, and the consciousness it generates can be – because it evidently is – immaterial.

On first sight, this concept makes good sense. On a second look, however, it encounters major problems. First, a conceptual problem. How could a material brain give rise to an immaterial consciousness? *How could anything material produce anything immaterial?*

In modern consciousness research this is called "the hard problem." It has no reasonable answer. As researchers point out, we do not have the slightest idea how "matter" could produce "mind." One is a measurable entity with properties such as hardness, extension, force, and the like, and the other is an ineffable series of sensations with no definite location in space and an ephemeral presence in time.

Fortunately, the hard problem does not need to be solved: it is not a real problem. The truth is that mind (in the current term, consciousness) is not *produced* by the brain – it is *transmitted* by the brain.

The transmission theory can overcome the hard problem of consciousness research, and it can account for an entire set of phenomena that the production theory cannot. These phenomena include NDEs (near-death experiences), OBEs (out-of-body experiences) ADEs (after-death experiences, and scores of other "anomalous" phenomena. Some of them prove to be remarkably widespread, and many have been meticulously recorded[2]. In their ensemble, they indicate that mind exists in the absence of a functioning brain. William James, the renowned founder of pragmatism, was so impressed with the cogency of mind-beyond-the-brain phenomena that in his 1899 Ingersoll Lecture he suggested that we should replace the brain-*production* theory of consciousness with the brain-*transmission* theory[3].

THE UNION OF ATMAN AND BRAHMAN: OUR CONSCIOUSNESS IS THE CONSCIOUSNESS OF THE COSMOS

The nonlocality of phenomena of consciousness suggests that what the brain transmits is not just *my* consciousness, but the collective consciousness of all conscious beings. It is a real presence in the real world; a nonlocal mind shared by every living system. In terms of the Eastern spiritual traditions, individual consciousness is Atman, and collective consciousness is Brahman. Atman and Brahman are one, even if one appears to be individual and the other collective.

The oneness of individual and collective consciousness is no longer a puzzle. We know that distributed information can be present in the world: it is the principle of the hologram. In a hologram all the information that constitutes the image is present in every part of the holographic plate, film, or medium. When you illuminate any one part, the whole image appears, and it appears wherever and whenever you illuminate the hologram. In fact, there are no "parts" in a hologram, because all its elements together constitute the fractal, self-similar whole that is the hologram as such.

If consciousness is a hologram in the world, our consciousness is a segment of the cosmic consciousness and it contains everything the cosmic consciousness does. It is a manifestation of the nonlocal consciousness of the cosmos, and it manifests in me and in all conscious beings.

The recognition of the oneness of individual and collective consciousness came with the growth of insight about the nature of mind and consciousness in history. Today we know more about the world than ever before, and we realize that consciousness began to be manifested in the world 13.8 billion years ago, when the first particles emerged in the wake of the Big Bang. It has been evolving ever since. It embraces the "entanglement" of quantum particles on the one end of the scale of its evolution, and the self-awareness of humans on the other. In the sphere of life it is present in the reactivity of single-celled organisms to their milieu, an irritability that shows up in their tropism. It is present in the "awareness" of the cells of multicellular organisms of their biochemical environment, and is focused on the interactions that enable the multicellular organism to maintain itself in the living state.

The vast range of the consciousness we observe is shown by the contrast between the basic tropism of single-celled organisms and the articulated awareness, including the self-awareness, of human beings. The highly evolved human forms of consciousness on this planet manifest insight, ethics, and genuine spirituality. Those who manifest such consciousness have embracing empathy, compassion, selflessness, and unconditional love.

An in-depth inquiry co-headed by biologist Humberto Maturana on behalf of the Brahma Kumaris World Spiritual University in the year 2009 identified further specifics. It appears that people with an evolved consciousness are stable, peaceful, and compassionate. They are dedicated to improving the life and mind of others without self-interest. They sense that their work has been assigned to them by a higher source and they are only instruments. Their beliefs and behaviours are consistent and integrated; they "walk their talk." They draw on a deep well of energy that gives them endless endurance and unlimited patience. They have an elevated vision of the people they serve, seeing their capacity for renewal, recovery, and progress. They have convictions that are so strong that they are not fazed by limitations in financial and intellectual support. And they manifest a quality of lightness in remaining open and available even when faced with immense tasks and responsibilities[4].

In the Western world people with this kind of consciousness are sometimes regarded as saints or healers: Saint Francis of Assisi and Mother Teresa are prime examples. In the indigenous world they are considered magicians, shamans, or medicine men (and women). And in the East they may be revered as higher spiritual beings, Boddhisatvas or ascended masters.

THE GOAL OF CONSCIOUSNESS-EVOLUTION

Individual consciousness evolves toward union with collective consciousness. This union has been known for millennia, but it was expressed in different ways in the world's religions. The Abrahamic religions called it an ascent to eternal life in the embrace of the Holy Trinity. The Eastern systems identified it as *samadhi,* the attainment of communion between Atman and Brahman, self and other, subject and universe.

Regardless of how it came to be expressed, the apex of the evolution of human consciousness was recognized to be the union of individual consciousness with the consciousness that pervades the cosmos. The union of individual mind and the cosmic mind, of Atman and Brahman, is the currently perceived highest stage of consciousness evolution. It signifies the attainment of enlightenment.

IMPLICATIONS FOR OUR LIFE

The key implication that enlightenment means the oneness of individual consciousness with the consciousness of the cosmos is *responsibility*. We are responsible for the evolution of humanity's consciousness, because our individual consciousness not only affects the consciousness of humanity: in the final count, it *is* the holographically integral consciousness of humanity. We can paraphrase Gandhi's famous saying: "be the consciousness you want to see in the world." The age-old insight, "you are the universe," revived inter alia in the recent book of that title by Deepak Chopra and Menas Kafatos, becomes "you are the consciousness that pervades the universe."

Knowing, literally "*re-cognizing*" the oneness of individual and collective consciousness has far reaching implications for our thinking and behaviour. The major problems we face, Einstein said, cannot be solved with the same consciousness that gave rise to them. With an enlightened consciousness, they could be solved. Because if we realize that the evolution of our consciousness is also the evolution of human consciousness, and that it conduces toward the oneness of people, life, and universe, we could hardly fail to adopt the evolution of our consciousness as the highest goal we can pursue in our life.

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[1] More on this question in *What Is Consciousness?* Ervin Laszlo, Larry Dossey and Jean Houston (New York: Select Books, 2016).

[2] See Ervin Laszlo with Anthony Peake, *The Immortal Mind* (Rochester, VT: Inner Traditions, 2014).

[3] William James, *Ingersoll Lecture on Immortality* (Boston: Houghton Mifflin, 1899).

[4] Judy Rodgers and Gayatri Naraine, *Something Beyond Greatness* (Deerfield Beach, FL: Health Communications, 2009).

Our perception of the world is a reflection of our state of consciousness.

Eckhart Tolle

All enlightenment of the universe is already ours,
it is we who have put our hands before our eyes and cry that is dark.

Swami Vivekananda

Enlightenment is the everyday consciousness
but two inches above the ground.

D.T. Suzuki

⊙ ♦ ⊙

DUANE ELGIN

HUMANITY'S JOURNEY HOME:

WE ARE LEARNING TO LIVE IN A LIVING UNIVERSE[1]

Duane Elgin is an American author, speaker, educator, consultant, and media activist. He received a Master of Business Administration from the Wharton School of the University of Pennsylvania in 1968 and a Master of Arts in economic history from the University of Pennsylvania in 1969. In 2001 Duane was awarded an honorary PhD for work in "ecological and spiritual transformation" from the California Institute of Integral Studies (CIIS) in San Francisco, and he is a member of the CIIS Council of Sages. In 2006 he received the annual Goi International Peace Award in Japan in recognition of his contribution to a global "vision, consciousness, and lifestyle" that fosters a "more sustainable and spiritual culture". Elgin has been a visiting scholar at Denison University in Ohio, and has been a 'distinguished scholar' at Rollins College in Winter Park, Florida. Duane was described (2009) by the Ecologist Magazine as one of the ten leading visionaries with "big ideas for a better world". Duane has authored a large variety of books and papers on consciousness and environmental studies.

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We are pilgrims together, wending through unknown country, home. Father Giovanni (1513).

HUMANITY'S MOST URGENT CHALLENGE

HUMANITY IS EXPERIENCING A COLLECTIVE identity crisis. Critical challenges to our future confront us with fundamental questions: Who are we? What kind of universe do we live in? Where are we going? Do we continue our rapid march into materialism, grounded in the assumption that we live in a universe that is indifferent to humanity and comprised mostly of dead matter and empty space? Or, do we open to transforming insight from the combined wisdom of science and the world's spiritual traditions: the universe is not dead at its foundations but is profoundly alive and we humans are an integral part of that larger aliveness. In the words of Plato, "The universe is a single living creature that contains all living creatures within it."

Our view of the universe profoundly impacts how we live in the world. If we think we live in a non-living universe without larger meaning and purpose, then it makes sense to exploit that which is dead on behalf of ourselves, the most visibly alive. Alternatively, if we have the direct experience of touching the aliveness of nature and the world around us, then it is natural to respect and care for the abundant expressions of aliveness. These are two radically different ways of looking the universe and, in turn, produce dramatically different views of our identity and evolutionary journey. This leads to a startling conclusion: The most urgent challenge facing humanity is not climate change, or species extinction, or unsustainable population growth; rather, it is how we understand the universe and our intimate relationship within it. Our deepest choices for the future emerge from this core understanding.

AT THE EVOLUTIONARY CROSSROADS

How have we come to such a critical crossroads in our evolutionary journey? First, in the last several hundred years, we have been spectacularly successful in exploiting the abundance of the Earth's resources to create a short period of unprecedented material prosperity for a minority of the Earth's population. This burst of affluence emerged from a worldview described as "scientific materialism" which regards the universe as non-living at its foundations and comprised mostly of empty space and inanimate matter. Second, based on this worldview, we have been consuming the Earth's resources far beyond her rates of regeneration. Short-term material prosperity is being gained at the cost long-term ecological ruin. As Wendell Berry reminds us, nature "has more votes, a longer memory, and a sterner sense of justice than we do." We are creating by our own hand a long-term future that is unforgivingly inhospitable for advancing human civilization.

We are being compelled by circumstances to come together – collectively and rapidly – to cope with climate disruption, massive human migrations, unsustainable population growth, critical shortages of key resources such as water, the threatened extinction of nearly half of all animal and plant species, and

much more. As world changing trends of enormous magnitude converge and amplify one another, the people of Earth will confront the unyielding reality that, unless we wake up and work together, we have only the legacy of a grievously wounded Earth and impoverished future to leave to our children and grandchildren. We require a new pathway ahead and are reminded of Einstein's famous words that "We cannot solve our problems with the same thinking we used to create them."

We are moving through a perilous phase of planetary transition. Hopefully we will have the wisdom to make deep, structural changes in our manner of living and turn toward a more sustainable and promising future. The alternative is the collapse, and even extinction, of human civilizations. It is unwise to be complacent about our future as collapse has happened numerous times. More than 20 major civilizations have collapsed over the millennia, including the empires of the Romans, Mayans, Aztecs, Easter Islanders, Anasazi, Mesopotamians, and the Soviets. Importantly, many examples of collapse involve climate change as a key, contributing factor.

Although collapse is nothing new, today is different in one crucial respect: There are no frontiers left. *The circle has closed*. The entire world has become a single, integrated system – economically, ecologically and socially. Never before has the entire planet been at risk of collapse – taking all the world's civilizations down at the same time. Our time of planetary transition is truly a great transition, unprecedented in human history and deeply formative in shaping the long-range future.

To move swiftly through this perilous time of planetary transition requires unprecedented breakthroughs in how we live and relate to one another. Yet, cooperation is difficult and slow in a world that is unravelling and where most people are coping with chronic, planetary-scale, traumatic stress. A natural tendency is for people to separate and seek islands of safety to ride out the disruptive storms of transition that are beginning to blow through the world. However, if we pull apart and seek only our personal security by retreating from the world and isolating ourselves, then systemic problems are certain to escalate and produce the very future of ruinous collapse we most fear.

Immense suffering can be a positive force for evolution *if* it burns through our denial and distraction and awakens humanity to our collective task of transition. The unrelenting suffering of millions, even billions, of human beings could penetrate through our complacency and isolation and awaken us to engaged action. Needless suffering could become a psychological and psychic fire that burns away surface differences to reveal a collective identity that is big enough and strong enough to provide the foundation for a sustainable global civilization.

THE REMARKABLE INVITATION

Being unflinchingly realistic, it does not seem likely we will turn away from our current path of separation–with its growing inequities, overconsumption of resources and deep injury to the Earth–unless we discover, *together*, a pathway into the future that is so truly remarkable, transformative, and welcoming that we are drawn ahead by the scope and intimacy of its invitation. Just in time, that pathway is being revealed by insights converging from science and the world's wisdom traditions. In a sentence: *We are discovering that, instead of struggling for meaning and a miracle of survival in a dead universe, we are being invited to learn and grow forever in the deep ecologies of a living universe.* To step into the invitation of learning to live in a living universe represents a journey so extraordinary that it transcends the wounds of our past and invites us to begin a process of healing and reconciliation to realize a remarkable future we can only reach together.

THE NATURE OF OUR COSMIC HOME

In contemplating a great turn toward this new pathway of development, it is important to ask: Is the universe truly as Plato described – "a single living creature" that contains all living creatures within it? Seeing the universe as a super-organism with a permeating aliveness is not new – this was humanity's basic understanding for thousands of years until gradually replaced by the worldview of scientific materialism roughly 300 years ago. Since then, the scientific community has been employing its ever more powerful tools to explore the nature of reality and has discovered a universe of astonishing depth and subtlety. In turn, the ancient intuition of a living universe is now being reconsidered as science cuts away superstition to reveal the cosmos as a place of unexpected wonder, depth, and sophistication. Here are six key attributes emerging from science that point toward a living universe:

1 ~ A UNIFIED WHOLE: In the last several decades, scientific experiments have repeatedly confirmed "nonlocality" and the discovery that the universe is a deeply unified system at the quantum level that communicates with itself *instantly*, across impossibly vast distances. To illustrate: At the speed of light, it takes more than eight minutes for a photon to travel from the sun to the Earth, and

more than 14 billion years to travel across our visible universe. Yet, quantum physics demonstrates these unimaginably vast distances are traversed and transcended, *instantaneously*, in the quantum realm. Science no longer views the universe as a disconnected collection of planets, stars, and fragments of matter. Instead, at the quantum level, the universe is fully unified and connected with itself at every moment. In the words of the physicist David Bohm, the universe is "an undivided wholeness in flowing movement."

2 ~ IMMENSE BACKGROUND ENERGY: For centuries, scientists thought empty space was "empty." Recently, scientists have discovered that an extraordinary amount of background energy permeates the universe. This invisible energy accounts for an estimated 96 percent of the known universe! In turn, the entire visible universe – atoms, people, planets, stars, and galaxies – constitutes 4 percent of the overall cosmos. Two kinds of invisible energy are known to exist: *dark matter* (a contractive force) accounts for roughly 23 percent of the invisible universe, and *dark energy* (an expansive force) accounts for approximately 73 percent of the universe. Empty space is not empty but is filled with titanic energies. David Bohm calculated that a single cubic inch of seemingly empty space contains the energy equivalent of millions of atomic bombs. We are immersed within a vast sea of subtle but astonishingly powerful energies with an array of capacities we are only beginning to discover.

3 ~ CONTINUOUSLY CO-ARISING: While an evolving universe provides a stunning narrative of "horizontal" unfolding *across* time, the insight of an emerging universe adds the "vertical" dimension of the universe continuously arising *in* time. The vertical dynamic of continuous creation slices through all that exists and presents everything as a single orchestration happening all at once. Despite outward appearances of solidity and stability, the universe is a completely dynamic system. Nothing endures. All is flow. Max Born, a physicist who was instrumental in the development of quantum mechanics wrote, "We have sought for firm ground and found none. The deeper we penetrate, the more restless becomes the universe; all is rushing about and vibrating in a wild dancce[2]." In the words of the cosmologist Brian Swimme, "The universe emerges out of an all-nourishing abyss not only fourteen billion years ago but in every moment[3]." At every moment, the entire universe is being regenerated as a singular orchestration of manifestation – a cosmic hologram being continuously projected into existence. There is one grand symphony in which we are all players, a single creative expression at each moment – a uni-verse.

4 ~ CONSCIOUSNESS AT EVERY SCALE: Scientists are finding evidence for consciousness or a knowing capacity throughout the universe. From the atomic level to the galactic scale, a self-organizing, centering capacity is at work that is fitting for each scale. In turn, the capacity for cantering self-organization points to the presence of some level of knowing consciousness. The physicist and cosmologist Freeman Dyson writes that, at the atomic level, "Matter in quantum mechanics is not an inert substance but an active agent, constantly making choices between alternative possibilities. […] It appears that mind, as manifested by the capacity to make choices, is to some extent inherent in every electron[4]." This does not mean that an atom has the same consciousness as a human being but rather that an atom has a reflective capacity appropriate to its form and function. Max Planck, developer of quantum theory, stated, "I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness[5]." An ecology of consciousness permeates the universe.

5 ~ FREEDOM AT THE FOUNDATIONS: Quantum physics describes reality in terms of probabilities, not certainties. This means that uncertainty and freedom are built into the very foundations of existence. No individual part of the cosmos determines the functioning of the whole; rather, everything is interconnected with everything else, weaving the cosmos into one, vast interacting system. In turn, it is the consistency of interrelations of all the parts that determines the condition of the continuously emerging whole. We therefore have great freedom to act within the limits established by the larger web of life.

6 ~ ABLE TO REPRODUCE ITSELF: A vital capacity for any living system is the ability to reproduce itself. A stunning hypothesis emerging from cosmology is the idea that our universe reproduces itself through the functioning of black holes. In this view, a black hole represents the seed from which a new universe can blossom and grow. Physicist John Gribbin writes, "Instead of a black hole representing a one-way journey to nowhere, many researchers now believe that it is a one-way journey to somewhere–to a new expanding universe in its own set of dimensions[6]." Given the presence of billions of black holes in

our universe, there could be countless other cosmic systems continuously being born by "budding off" from our universe through the birth canal of black holes. Gribbin writes that universes are not only alive; they also evolve as do other living systems: "Universes that are 'successful' are the ones that leave the most offspring[7]." The idea that there have been countless universes evolving through time is not new. A precursor can be found from 1779 when David Hume wrote, "Many worlds might have been botched and bungled, throughout an eternity, ere this system was struck out; much labour lost, many fruitless trials made; and a slow, but continued improvement carried on during infinite ages in the art of world-making[8]."

When we bring these attributes together, a clearer picture of our remarkable universe comes into focus: The universe is a completely unified system that is continuously regenerated by the flow-through of phenomenal quantities of life energy whose essential nature includes consciousness, or a knowing capacity, that enables systems at every scale of existence to centre themselves and exercise some measure of freedom of choice. In addition, the universe appears able to reproduce itself via black holes within a vastly larger cosmic garden or multi-verse, where our universe is but one among countless others. Overall, the vision of the universe emerging from science is that of a magnificent, evolving super-organism.

HOW WISDOM TRADITIONS REGARD THE UNIVERSE

How does the emerging, scientific view of a living universe fit with the originating insights of the world's major wisdom traditions? Is there a place of meeting in their respective views? Despite their many differences, when we penetrate the depths of the world's major spiritual traditions, a stunning understanding about the universe emerges that is in accord with insights from the frontiers of science: We live within a living universe that arises, moment-by-moment, as an undivided whole in an unutterably vast process of awesome precision and power. The following quotes illustrate how this remarkable understanding is expressed across the world's major religions (excerpted from my book, *The Living Universe*):

- CHRISTIAN: "God is creating the entire universe, fully and totally, in this present now. Everything God created . . .God creates now all at once[9]." Meister Eckhart, Christian mystic.
- ISLAM: "You have a death and a return in every moment. . . Every moment the world is renewed but we, in seeing its continuity of appearance, are unaware of its being renewed[10]." Rumi, 13th century Sufi teacher and poet.
- BUDDHIST: "My solemn proclamation is that a new universe is created every moment[11]." D.T. Suzuki, Zen teacher and scholar.
- HINDU: "The entire universe contributes incessantly to your existence. Hence the entire universe is your body[12]." Sri Nisargadatta, Hindu teacher.
- TAOIST: "The Tao is the sustaining Life-force and the mother of all things; from it, all things rise and fall without cease[13]." *Tao Te Ching*.
- INDIGENOUS: "[…] there was no such thing as emptiness in the world. Even in the sky there were no vacant places. Everywhere there was life, visible and invisible […]"[14] Luther Standing Bear, Lakota elder.

Beneath the differences in language, a common vision is being described–the universe is continuously emerging as a fresh creation at every moment. All point to this same, extraordinary insight: the universe is not static, nor is its continuation assured. Instead, the universe is like a cosmic hologram that is being continuously upheld and renewed at every instant. A universal encouragement found across the world's wisdom traditions is to *live in the "NOW."* This core insight has a clear basis in physics: The present moment is the place of direct connection with the entire universe as it arises continuously. Each moment is a fresh formation of the universe, emerging seamlessly and flawlessly. When we are in the present moment, we are literally riding the wave of continuous creation of the cosmos – reality surfing.

A LIVING UNIVERSE IN EVERYDAY HUMAN EXPERIENCE

How does a living universe perspective fit with our everyday human experience? If the unity of existence is not an experience to be created but an always-manifesting condition waiting to be appreciated, then how wide-spread is this experience in people's lives? Do many people experience the everyday world around ourselves as "alive"? Scientific surveys give us insight into this key question:

- A global survey involving 7,000 youths in 17 countries was taken in 2008. It found that 75 percent believe in a "higher power," a majority say they have had a transcendent experience, believe in life after death and think it is "probably true" that all living things are connected[15]. These views are in accord with a paradigm of aliveness.

We can secure further insight from scientific surveys conducted in the United States that show a measurable transformation in mainstream consciousness is underway.

~ In 1962 a survey of the adult population in the US found that 22 percent reported having a profound experience of communion with the universe. By 2009, the percentage of the population reporting a "mystical experience" had grown dramatically to 49 percent of the adult population[16].

~ In a national survey of the US in 2014, nearly 60 percent of adults reported they regularly feel a deep sense of "spiritual peace and well-being," and 46 percent say they experience a deep sense of "wonder about the universe" at least once a week[17].

~ A 2002, national Gallup survey asked respondents to rate the statement, "I have had a profound religious experience or awakening that changed the direction of my life." A stunning 41 percent of Americans (about 80 million adults at the time), said the statement *completely* applies to them[18].

~ A 2009 Pew survey of a national sample of Americans found that roughly three-in-ten Americans (29 percent) say they have felt in touch with someone who has died and a quarter say they believe in reincarnation[19].

~ Another trend indicative of cultural awakening is the growing use of psychedelics such as mushrooms, ayahuasca and LSD. In a US survey published in 2013, an estimated 32 million adults or just over 10 percent of the adult population said they have used psychedelics[20]. These drugs can awaken mystical experiences marked by feelings of unity with the universe, a sacred sense of reality, and an expanded sense of self. Psychedelics are being used to treat depression and post-traumatic stress in war veterans, so the healing potential of the experiences they facilitate is well established.

These surveys show that experiences of spiritual communion with the aliveness of the universe are not a fringe phenomenon but, instead, are familiar encounters for a large portion of the public. Humanity is measurably waking up to a larger view of ourselves and the universe.

Awakening to the unity and intelligent aliveness of the universe is often accompanied by feelings of great joy, boundless love and the presence of a subtle, radiant light. To illustrate, below is a classic account of a spontaneous awakening experience. While an undergraduate student, F.C. Happold had this experience of communion with the permeating aliveness of the universe:

"There was just the room, with its shabby furniture and the fire burning in the grate and the red-shaded lamp on the table. But the room was filled by a Presence, which in a strange way was both about me and within me, like light or warmth. I was overwhelmingly possessed by Someone who was not myself, and yet I felt I was more myself than I had ever been before. I was filled with an intense happiness, and almost unbearable joy, such as I had never known before and have never known since. And over all was a deep sense of peace and security and certainty[21]."

Turning from spontaneous awakening to the intentional exploration of consciousness, for more than two thousand years, pioneering individuals have been investing years in solitude and sustained meditation to directly investigate the nature of reality. What these explorers of consciousness have discovered is not a grey, machine-like hum of a non-living universe but, instead, an ocean of unbounded love, light and creative intelligence whose nature is beyond the reach of words[22]. When our personal aliveness becomes transparent to the aliveness of the living universe, transformational experiences of wonder and awe emerge naturally. As we open into the cosmic dimensions of our being, we feel more at home, less self-absorbed, more empathy for others and an increased desire to be of service to life. These shifts in perspective are immensely valuable for building a sustainable future.

Given the psychological and social benefits of meditation, it is understandable that as people are confronted with an unraveling outer world, a growing number are turning inward in search of a more direct and felt connection with life – and this has helped produce a rising wave of interest in meditation around the planet. For example, a 2012 study in the US found that 8 percent of adults or roughly 18 million persons meditate regularly[23]. Ancient wisdom traditions are being rediscovered and adapted to modern conditions. People are developing a new literacy of consciousness in their everyday lives. For example, the elevated experience of "flow consciousness" is now recognized, not only by meditators, but also by high-performance sports teams, jazz ensembles, business-project teams, farm workers, classrooms, community groups, and more[24]. Humanity is developing a basic literacy of consciousness.

Humanity's awakening is being further accelerated by virtual reality technologies that immerse people in alternative worlds of experience and expand how we view, and think about, the "ordinary world" around us. Inexpensive headsets with a computer interface are making immersive experiences in alternative realities widely available for education, medicine, games, urban planning, and much more. In a simulation, nothing real "really" exists – except as a computer program and

yet, when we put on a VR headset, within seconds our sensory experiences and reactions feel incredibly real. What is "reality"? By directly experiencing our immersion within an alternative reality that feels real to our senses, our curiosity can be awakened regarding the reality of our everyday experience. Because virtual reality so vividly creates the felt-experience of entering alternative worlds, it loosens our attachment to a singular view. Virtual reality technologies are an evolutionary catalyst, awakening mainstream cultures to viewing the universe as a continuously refreshed, cosmic hologram that can be known consciously and directly because we are an integral expression of it. As these diverse streams of awakening converge, they are forming a river of wisdom that is transforming global consciousness and culture.

OUR BIO-COSMIC IDENTITY AND EVOLUTIONARY JOURNEY

Summarizing: Powerful trends are converging to awaken the paradigm of a living universe in mainstream global culture: astonishing new attributes of the universe from scientific discoveries, confirming insights from the world's wisdom traditions, measurable growth in awakening experiences from around the world, accelerated learning through virtual reality technologies, and much more. What does this combined wisdom tell us about our identity and evolutionary journey?

1 ~ BIO-COSMIC IDENTITY: From a living universe perspective, our identity is immeasurably larger than our purely biological self. We are vastly more than a skin-encapsulated bundle of chemical and neurological interactions. Our physical existence is permeated and sustained by an aliveness that is inseparable from the larger universe. Seeing ourselves as part of the fabric of creation awakens our sense of connection with, and compassion for, the totality of life. Cosmologist Brian Swimme explains that the intimate sense of self-awareness we experience bubbling up at each moment, "is rooted in the originating activity of the universe. We are all of us arising together at the centre of the cosmos." We once thought that we were no bigger than our physical bodies, but now we are discovering that we are deeply connected participants in the continuous arising of the entire universe. Awakening to our larger identity as both unique and inseparably connected with a co-arising universe transforms feelings of existential separation into experiences of subtle communion as bio-cosmic beings. We are far richer, deeper, more complex and more alive than we ever thought. To discover this in our direct experience is to enter a new age of exploration and discovery.

2 ~ COSMIC PURPOSE: It is a precious gift to be born as a human being. Our bodies are biodegradable vehicles for acquiring soul-growing experiences. As compostable conduits for channelling learning experiences, our bodies are the current expressions of a creative aliveness that, after nearly 14 billion years, enable the universe to look back and reflect upon itself. While we have the gift of a body to anchor our experience, it is important to recognize our bio-cosmic nature. In the Gospel of Thomas, Jesus says, "Take heed of the Living One while you're alive, lest you die and seek to see Him and be unable to do so." An ancient Greek saying speaks even more directly, "Light your candle before night overtakes you." If the universe were non-living at its foundations, it would take a miracle to save us from extinction at the time of death, and then to take us from here to a heaven (or promised land) of continuing aliveness. However, if the universe is alive, then we are already nested and growing within its aliveness. When our physical body dies, the life-stream that we are will move into the larger aliveness. We don't need a miracle to save us–we are already inside the miracle of sustaining aliveness. Instead of being saved from death, our job is to bring mindful attention to our ever-emerging aliveness in the here and now.

We are moving from seeing ourselves as accidents of creation wandering through a lifeless cosmos without meaning or purpose, to seeing ourselves consciously engaged in a sacred journey of discovery in a universe of vast depth and richness. An old saying goes, "A dead man tells no stories." In a similar way, "A dead universe tells no stories." In contrast, a living universe is itself a vast story continuously unfolding with countless characters playing out gripping dramas of awakening, inseparable from the artistry of world-making. The universe is a living, unfolding creation. Saint Teresa of Avila saw this when she wrote, "The feeling remains that God is on the journey, too." If we see ourselves as participants in a cosmic garden of life that has been growing patiently over billions of years, then we feel invited to shift from feelings of indifference, fear and separation to feelings of curiosity, love, and participation. In the words of Annamarie Schimmel, "Once the journey to God is finished, the infinite journey in God begins."

3 ~ NATURAL ETHICS: If we are no more than biological entities, then it makes sense to think we could disconnect ourselves from the suffering of the rest of life. However, if we are all swimming in the same ocean of subtle aliveness, then it is understandable that we each have some measure of direct experience of being in communion with the larger fabric

of life. Because we share the same matrix of existence, the totality of life is already touching each of us and co-creating the field of aliveness within which we exist. A felt ethics emerges from our intuitive connection with the living universe in the form of a "moral tuning fork." We can each tune into the non-local field of life and sense what is in harmony with the well-being of the whole. When we are in alignment, we experience a warm, positive hum of well-being as a kinesthetic sense that we may call "compassion." In a similar way, we can also experience the dissonant hum of discordance. When we are cantered in the life current flowing through us, we tend to act in ways that promote the wellbeing of the whole. In recognizing we are partners in the unfolding story of cosmic evolution, we shift from a sense of existential isolation to feelings of intimate communion. With life is nested within life, we treat everything that exists as alive and worthy of great respect. We recognize that every action has ethical consequences that cascade instantly throughout quantum-linked cosmos.

4 ~ SUSTAINABLE LIVING: The Earth cannot sustain humanity's current levels and patterns of resource consumption. We are moving rapidly beyond the long-term carrying capacity of the planet. The paradigm of materialism is leaving a devastated Earth as our legacy to our children. The perspective of a living universe offers a very different understanding and future: *Aliveness is the only true wealth.* Nothing is more precious than learning to live in the deep ecology of the living universe. If we focus our attention on growing our experience of aliveness, it is only natural for us to choose simpler ways of living that afford greater time and opportunity to develop the areas of our lives where we feel most alive–investing our time in nature, nurturing relationships, caring communities, creative expressions, and service to others. In seeing the universe as alive, we naturally shift our priorities from an "ego economy" based upon consuming deadness to an "living economy" based upon growing aliveness. An aliveness economy seeks to touch life more lightly while generating an abundance of meaning and satisfaction.

5~ ECO-VILLAGES & NEW COMMUNITIES: A deep change in perspective finds natural expression in how we construct our everyday lives. As we learn to live sustainably while creating lives of greater satisfaction and fulfilment, new forms of community will be a natural outcome. As the world unravels, smaller communities can provide lifeboats of resilience to weather the storms of transition. Communities of the scale of a "village" (roughly one or two hundred people) are small enough to support a rich array of personal relationships and large enough to support a vibrant micro-economy and diverse social activities. Large-scale breakdowns will produce local breakthroughs in patterns of living. Cities could be decentralized rapidly into thousands of relatively self-reliant and highly resilient "eco-villages," each with distinctive adaptations of architecture, culture, and expressions of sustainability. Common to most would be a child-care facility and play area, a common house of some kind (for community meetings, celebrations, and regular meals together), a community garden, a recycling and composting area, solar energy systems, a bit of open space, and a workshop. Each could offer a variety of services to the surrounding eco-villages as well; for example, organic gardening, green building, conflict resolution, health care, home schooling, elder care, and so on. Ecovillages could replace the alienating and insecure landscape of massive urban regions with countless, small islands of sanity, security and resilient community. Ecovillage living would offer a path of separation and retreat from the world were it not for the internet and social media creating an intensely interconnected and interdependent planet that is ever-more transparent to itself.

Awakening to our conscious connection with the living universe naturally expands our scope of concern and compassion–and brightens the prospect of working together to build a sustainable future. However, making the turn from separation to connection does not end our journey of learning. As we discover the astonishing depths and subtlety of the universe, we recognize we have as much to learn on our journey of return as we have acquired on our long journey of separation. This is humbling news. Instead of the current era representing the pinnacle of human evolution, we appear to be approaching a midway point in the journey of awakening. We still have far to go and much to learn to reach our initial maturity as a dynamically stable, species-civilization.

HUMANITY'S CHOICE

Our first task as a human community is to recognize the remarkable choice directly before us. On the one hand, if we regard the universe as dead at its foundations, then feelings of existential alienation, anxiety, dread, and fear are understandable. Why seek communion with the cold indifference of lifeless matter and empty space? If we relax into a dead universe, we will simply sink into existential despair, so better to live on the surface of life. On the other hand, if we live in a living universe, then feelings of subtle connection, curiosity, and gratitude are natural. When we see ourselves as participants in a cosmic garden of life that has been developing patiently over billions of

years, we shift from indifference, fear, and cynicism to curiosity, love, and awe. Humanity's future pivots on which understanding prevails and the choices that naturally follow.

The well-being of humanity and the Earth depends upon this generation waking up, growing up, and moving from our adolescence into our early adulthood as a species, and thereby establishing a new relationship with nature, other humans, and the living universe. If we do not welcome the miracle of life around us and within us, the alternative seems likely to be our effective extinction as a species. Climate chaos, sea level rise, mass migrations, species extinction and more are accelerating and moving past critical tipping points, producing irreversible changes to the Earth, and making humanity's turn toward a sustainable future immensely more difficult. Would we choose ruin over life? As unthinkable as it may be, it seems painfully realistic to conclude that, *unless the great diversity of humanity can find an awe-inspiring bridge to the future that is grounded in a commonly felt experience of tremendous, untapped evolutionary potential, we will not have the soulful motivation needed for turning from separation and survival to community and co-evolution.*

Our situation is unprecedented: *We are being pushed by Earth-sized ecological necessity and pulled by Universe-sized evolutionary opportunity.* If we lose sight of where we are (living within a living universe), we profoundly diminish our understanding of who we are (beings of both biological and cosmic dimensions), and the journey we are on (learning to live within the depths of cosmic aliveness). *Ultimately, in learning to live in a living universe, we are learning to live in the deep ecology of existence – in eternity. This is such an astonishing call to our soulful nature from the deep compassion of a living universe that we would be spiritual fools to ignore such a precious invitation.*

We are in an early, "establishing phase" of conscious evolution where we are just beginning to recognize ourselves in the mirror of reflective consciousness. Although the universe has been growing us through countless lifetimes, only now are we waking up to who and what we truly are. As we use the internet and social media to collectively witness our planetary journey, it is helpful to view the path as a reflexive loop that turns back upon itself. We are in the process of realizing our self-given name as a species: *homo sapiens sapiens* or the being that "knows that it knows." In becoming "doubly wise," we turn the knowing faculty back upon itself and, ultimately, become aware that we are awareness itself–an invisible knowing-presence at the foundations of the living universe.

As the push of outer necessity meets the pull of untapped inner capacity, humanity is beginning to awaken. And yet, adversity trends such as climate change are accelerating so rapidly there is a real danger that humanity's responses could prove to be too little and too late–and we may veer off into a new dark age. If we are distracted and in denial, and overlook the urgency and importance of the great transition now underway, we will miss a unique, never to be repeated, evolutionary opportunity. Each generation is asked to make sacrifices for the next, to be a caretaker for the future. This generation is being pushed by an injured Earth and pulled by a welcoming universe to make a monumental gift to humanity's future: working together with equanimity and maturity to consciously realize our evolutionary potential and purpose of learning to live in a living universe.

♦

[1] From a forthcoming volume published by the Global Purpose Movement (November, 2017) <http://bit.ly/2qzgwbK>.

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[7] *Ibid.*: 252.

[8] David Hume, "Critique of the Design Argument," http://bit.ly/2r3xYse.

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[20] "Over 30 million psychedelic users in the United States," Published online March 28, 2013; http://bit.ly/2rbTp8V.

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[22] See, for example, descriptions of the generative source of the universe; *The Living Universe*, *op. cit.*: 86-89.

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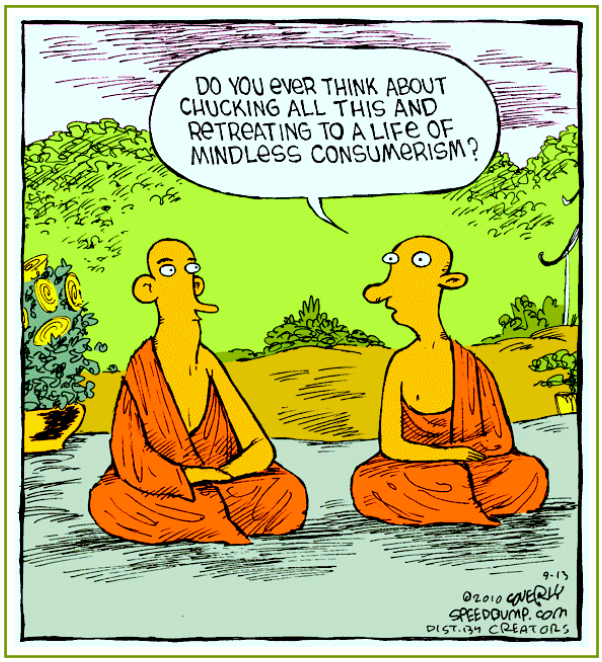


One does not become enlightened by imagining figures of light,
but by making the darkness conscious.

Carl G. Jung

Our brains are so conditioned through education, religion, and all the rest
to think we are separate entities with separate souls and so on.
We are no individuals at all, we are the result of thousand of years of human
experience, endeavours and struggles.

Jiddu Krishnamurti

Enlightenment is when a wave realises it is the ocean.

Thich Nath Hanh

⊙ ♦ ⊙

GEORGE PÓR

ON THE VERGE OF COLLECTIVE AWAKENING

George is a strategic learning partner to visionary leaders in business, government and civil society, and an independent scholar whose academic posts included London School of Economics, INSEAD, UC Berkeley, and Université de Paris. He is founder of CommunityIntelligence, and Enlivening Edge, the online magazine of the "next-stage organizations" movement. Email: george.por@gmail.com.

♦

I dedicate this writing to the partners, collaborators, and readers of Enlivening Edge*, the online magazine and community in the forefront of organizational and social renewal.*

♦

The darkest hour is just before the dawn – Thomas Fuller.
None of us is free until all of us are – Martin Luther King.
Life doesn't know what it will be until it notices what it has just become –
Margaret Wheatley & Myron Kellner-Rogers.

AN (AUTOBIOGRAPHICAL) INTRODUCTION

MY DECADES-OLD QUEST FOR HIGHER meaning reached a new phase with the question, "what is the pattern that connects awakening to our highest potential in individual, organizational, and social life?" I felt if I could discover that pattern, I'd be able to unlock the synergy between the directions of my calling to walk on the paths of personal, organizational, and social evolution.

That discovery started in the early years of this century, when I got acquainted with and dove into Integral Theory and Spiral Dynamics, frameworks that I could apply to the three domains of evolution that were of most interest to me. The exploration continued when Otto Scharmer introduced me to the U Process in 2005. This is a process that takes a group through cycles, where they can access different perspectives and solutions regarding organizational and cross-organizational (or even personal) issues.

In the years following my first Theory U workshop, I immersed myself in the life of various "we-spaces," nourishing environments for accelerated personal and collective development. That made me expand the domain of my pattern-seeking and insert the "community" level between "individual" and "organizational" in the chain that stops at the "social" scale of awakening.

The understanding of the patterns that connect the edges of our evolution (in those four dimensions), and what drives them, became both my passion and an ever-deepening and endless work-in-progress. What follows is a report reflecting the current state of my quest, at least as much of it that I was able to pull into this writing, as of May 2017.

The four sections of this essay that serve as contexts for outlining the meaning, conditions and practices of "collective awakening" are: What Brings Me to We; Collective Buddha; Wisdom-Driven Enterprise; and Awakening to a Wiser Society. Exploring and unleashing the synergy of transformative work across all four domains call for an action research.

COLLECTIVE AWAKENING BEGINS...

Collective awakening begins with my nascent recognition of our togetherness, inside me. Not only am I part of the group, but in many ways, the group is also part of me. That part is arising naturally in each of us. Moving from toddler to young adult, I needed to develop a solid "I." As I moved on, I began to break out from the prison of the "I", to outgrow my illusory self-sense: that I am a *separate* self, apart, and that *I/me* is the most meaningful unit of reference for cognition or wholeness. Mediated by the affordances of our global networks, there are more and more people who can experience the same.

Collective awakening is awakening *from* a reality distorted by our mind, its conditioning by our fears, avoidances, ego-gratifying tendencies, as well as our cultural givens defined by an educational and political system and other social institutions, aimed at conserving the dominant socio-economic order.

Collective awakening is also awakening *to* our highest potential as human beings, individually and together. As I continue to grow in awareness, I feel my place in a wider whole. I'm awakening to my belonging to humankind as a planet-wide species with its

evolutionary journey, and I grow immersed in its ocean of implications, with more and more curiosity. One of them is re-discovering what it is to be a human being, freely exercising ones creative faculties in self-organizing communities of other free agents.

We're at the crossroads of an epochal transformation, when the options are collective enlightenment or collective "endarkenment" (Ventura, 1990). The "we" is humankind that doesn't have its own agency to choose between them. The internal contradictions of the status quo, left to their own devices, will simply lead us into a deeper entanglement with our intertwining global crises.

The good news is that "we are the product of the process of evolution, and … we have become the process itself, through the emergence and evolution of our consciousness, our awareness, our capacity to imagine and anticipate the future, and to choose from among alternatives." (Salk, 1985).

When everything is *"getting better and better and worse and worse, faster and faster, simultaneously," as Tom Atlee wrote*[1], how do we deal with the ensuing chaos?" In a research paper (Pór, 2008) I postulated collective intelligence as the source of the answer. Today, I know that in itself, it cannot be the answer, because without a massive awakening to a new level of consciousness, collective intelligence will be and is being also used by the trends of endarkenment.

Collective awakening may begin in our consciousness but cannot end there. To be viable at the requisite large scale, it needs to be integral and manifest also in our behaviour, culture and social systems. We'll know it does when all our social institutions will have been re-invented and re-designed for enabling the blossoming of our greatest individual and collective potential. While "awakening" has traditionally been discussed in a spiritual context, the distinction of integral, collective awakening needs to be explored also in a systemic context.

Intentional evolution in that direction requires a form of large-scale, Participatory Action Research, where PAR is defined as "a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview […] [and bringing] together action and reflection, theory and practice, in participation with others in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and communities" (Reason & Bradbury, 2001).

GENERATIVE ACTION RESEARCH

To support collective awakening at a requisite scale, action research must be conducted in expanding, cumulative circles of involvement. To address that requirement, I initiated the development of the Generative Action Research (GAR) methodology (Pór, 2014a).

> The concept of "generativity" has been used in social sciences in various ways, starting with Erickson, who applied it to labeling the stage of a psychosocial development, when "the concern in establishing and guiding the next generation"[2] appears. Gergen writes about the "ideal of generativity, in which theory serves the dual role of undermining convention and providing refreshing theoretical alternatives"[3]. In a key paper, Schön talks about "generative metaphors" as metaphors that help us gain new perspectives of the world[4].
>
> "The word generativity appears frequently in the Appreciative Inquiry literature in phrases such as generative dialogue, generative metaphor, and generative inquiry. In this context, the use of the term generativity is often inspired by Gergen's argument for the creation of 'generative theory' – theory that challenges the status quo and opens new repertoires for thought and action[5]."

More recently, voices in the AR Plus collective further redefined the concept: "Generativity stretches the meaning of sustainability from survival into more lofty aspirations. …[A] promising expanded definition of sustainability as 'the possibility that human and other forms of life will flourish on the Earth forever' takes our responsibility for sustainability beyond the human group, it extends our temporal horizon and it awakens our yearning to create a future reality that is not available yet […] When we take a generative stance, we ask what might be the noblest possibilities for human existence on earth and commit to engage with one another and the larger world in relational processes that bring those possibilities within reach[6]."

My GAR methodology (Pór, 2010) shares that stance of generativity and is deeply resonant with "our cooperative capacity to reunite seeming opposites such as theory as practice, the secular as sacred […] Inquiry is the experience of mystery, moving beyond the edge of the known to the unknown, which then changes our lives[7]." Generative Action Research is also inspired by the work of Thomas Hübl, another author of this issue, who is "exploring the relationship between outer science and inner experience with the focus upon active engagement with the global challenges facing humanity in today's post-modern society[8]."

At the end of each section, you will find a set of sample questions aimed at contributing to the design conversation for any GAR initiative that the section may trigger. They are mere conversation opener that I offer with the understanding that each cycle of

inquiry and action will feed the next cycles with questions growing out from the previous ones.

Before diving into exploring the scales of collective awakening, let's re-focus on the concept of "generativity." My use of that term distinguishes from, transcends, and includes its uses by most of the traditional and AR and Appreciative Inquiry literature. Its main distinguishing feature is the set of attributes grounded in the evolution of natural systems, where they are described with the processes of gathering, repeating, sharing, and transforming[9].

Generative capabilities manifest in a group of any size (including humankind itself) in a way that permits it to continuously improve its ability to evolve. The four generative capabilities essential in collective awakening are:

SELF-SUSTAINING

Balancing change and continuity in a way that supports the life-enhancing, future-responsive forces of the organization.

~ Creating a robust and agile collective "nervous system:" a foundation of innovation and sustainability.

~ Developing and using collective sensing and meaning-making organs, and a shared memory.

For a system or method to be self-sustaining, it needs to attract (gather) uses and users.

SELF-IMPROVING

Intentionally and continuously improving individual and collective effectiveness by:

~ Setting the action/assessment/feedback/learning loops so that they provide an improvement-supporting infrastructure.

~ Learning to *generate* new capabilities, then *generalize* them throughout the system.

For a system or method to be self-improving, it has to repeat the attraction process until a sufficient number of elements allow new combinations that improve it.

SELF-EVOLVING

Consciously searching for listening to an evolutionary purpose (Laloux, 2014) and higher forms, e.g.:

~ A corporation dedicated to serve the common good (including future generations) has a higher purpose than one, which focuses only on stockholder value.

~ Organizing forms designed to foster trust, truth-telling, collaboration, self-reflection and creativity are higher forms than those that perpetuate patterns of fear, scarcity, secrecy, and control over people.

For a system or method to be self-evolving, its elements need to be able to freely interact with each other (share) so that emergent evolution can occur.

SELF-PROPAGATING

Embodying the core idea in a way that inspires others to awaken new possibilities in their lives, relationships, and organizations, through, e.g.:

~ Being a source of learning and experience for others; consciously spreading innovative practices worth replicating.

~ Participating in evolutionary learning communities that both learn and teach.

For a system or method to be self-propagating, it has to facilitate its replication and transformation in an entirely new developmental cycle.

These are the four generative qualities that a well-designed Generative Action Research must provide if its objective is to foster transformative, collective awakening at all four scales (micro, meso, macro, and mundo). That can be achieved only in consultation and partnership with local and collective actors and their participation in the expanding circles of involvement.

While this essay outlines only the need and possibility for such research (if and when this research, highly significant to our common future, attracts the resources needed for its deployment), it will no doubt contribute not only to collective awakening, but also, to the theory and practice of Generative Action Research.

I started this paper by exploring how I am part of the collective process and how it is also part of me. That kind of self-reflexivity is a hallmark of awakening communities, and it should also be the hallmark of the small community of action researchers forming around this project.

WHAT BRINGS ME TO WE

We only can come to our fullness if we are in relationship with one another. – PELE ROUGE CHADIMA.

For three decades of my life I worked hard for my awakening. In those years, "awakening" for me was synonymous with personal awakening to an ultimate truth and an irreversible peace of mind. In the last decade or so, I discovered a more appealing possibility: collective awakening, divested of the spiritual connotation, which means simply, a group of (any size) becoming conscious of and committing to realizing its highest potential. During those years, I also learned that personal transformation could be reached and sustained only in the presence or (or relationship with) a community that maintains the values, possibility an practices of the transformative state being sought.

The shift was gradual and inspired by my long-term fascination with Martin Luther King's saying, "none of us can be free until all of us are", both in the inner and outer sense of liberation. More than a moral injunction or an intellectual puzzle, it became a teaching device for me, guiding the orientation of my lifework. That's because I am one of those privileged few, whose work is indistinguishable from play, and I'm passionately curious about a world where work and all social institutions are designed to let each and everyone of us experience such confluence.

Is it possible, or is it just a pipedream? Frankly, I don't know for sure. Whatever it is, the only way to find out is by embarking on a path of action research into co-creating it. One of my motivations for writing this essay is to discover what is needed for gearing up to it. I use writing for mapping the territory to be explored, but I don't forget that the territory, where it's happening is the one where the connected practices take place.

A good inter-personal introductory practice is the Equality Practice, "a way of connecting with others and realizing that you and they are in the same boat. It is a simple human truth that everyone, just like you, wants to be happy and to avoid suffering. Just like you, everyone else wants to have friends, to be accepted and loved, to be respected and valued for their unique qualities, to be healthy and to feel comfortable with themselves. Just like you, no one else wants to be friendless and alone, to be looked down upon by others, to be sick, to feel inadequate and depressed. The equality practice is simply to remember this fact whenever you meet another person. You think, just like me, she wants to be happy; she doesn't want to suffer" (Chödrön, 2004).

The "just like me" exercise, when practiced frequently, help us get grounded in an embodied sense of our oneness. It's a precursor to the capacity of hosting another's wholeness within us. It is an experience familiar to all those, who have ever felt deep empathy with someone. As a consequence of such empathy, "when I am arising in you because you are listening to me, you hear me speaking in you, in your brain and in your perception. I am not filtered in you by your judgments, and we both feel energized by connecting with the energy that is emerging." (Anna Betz, personal communication)

From there it's only one step to allow, not just one person, but a beloved community to come alive inside oneself. One has to let the community awaken within, before s/he will have enough motivation to support the awakening of the community that s/he belongs to. Being a host to a community within one's own identity is a high-level, holistic competence that is easier for some to attain than others, depending on temperament, state of consciousness and stage of development.

Hosting the We-in-the-I is a competence native to the post-conventional developmental altitudes, and can also be intentionally cultivated. In fact, it is being cultivated in many of the 'We-space' communities coming together around the work of such evolutionary thought leaders and consciousness pioneers as Thomas Hübl, Ken Wilber, Diane Musho Hamilton, Patricia Albere, and Dustin DiPerna.

DiPerna has also evolved a framework for a "We" line of development moving from lower to higher levels. "Each of these levels of We-space can be *intentionally generated* by a group of individuals practicing together. Such an act of conscious generation can be learned over time as members of the 'We' increase their 'We' intelligence." (DiPerna, 2014) The author differentiates 7 altitudes of We-intelligence that individuals can occupy. From the perspective of the capacity to participate in and promote collective awakening, the most relevant is the shift from the 'Transformational' to the 'Awakened' We-space intelligence.

4. *Transformational We-space* Comparable to a classic spiritual community, this level's "We" engagement is focused on individual transformation. Sometimes this takes the form of a focus on individual awakening. (think: the classic Buddhist sangha.) On other forms at this level of "We," individuals focus on the cultivation of members' highest potential. (Think: golden shadow.)

5. *Awakened We-space* All members have done enough individual transformation that they can enter into awakened awareness (the deepest vantage point). From this perspective a group of people can look around the room at each other in full recognition that there is one awareness moving through each of them. This is the first level of t*ranspersonal* We-space." (DiPerna, 2014).

In the "4-to-5" shift, people transcend their focus on personal awakening and become more interested in the awakening of the field that connects them. That shift is the most momentous one in the co-evolution of person and community.

At those rare occasions when I had a chance to experience all voices in a community as expressions of one and the same consciousness, the "I" evaporated. It didn't get subsumed into a Borg-like superorganism, more like, it expanded its boundaries. At the same time it got both transcended and enriched by the new, higher perspective on reality.

Collective awakening cannot be reduced to individuals outgrowing their small self. Nevertheless, in

the realm of the evolution of consciousness, its main condition is simply having enough people with at least an Awakened We-space intelligence, so that they can become a decisive influence on the culture of the collective.

"Those we-spaces are vessels that help life carry itself forward towards higher relational competence, harmony, and complexity." (Pór, 2014c) Up shifting on our We-space line of development, we recognize that, in a fractal-like recursion, we are both whole and parts of other, encompassing wholes. Participating and facilitating the emergence of higher We-spaces, we align with the general direction of evolution.

As more and more of us join in a co-creative dance of autonomy and communion, we are gradually awakening to our prior unity, the intrinsic oneness of humankind and all of Life.

GENERATIVE ACTION RESEARCH QUESTIONS FOR THIS SECTION

From 1st person perspective:

- What behaviors do we notice shifting on the way from Me to We?

- What specific relationships can I observe between my different lines of development on the transformative journey?

From 2nd person perspective:

- What are the practices worth replicating for facilitating the emergence of higher stages in our individual We-space intelligence? In what ways do those higher stages show up in people's behavior?

- How did reading this section expand (or not) the original motivation that made you want to read this article?

- How do our We-space intelligence, power, and capacity for higher forms of love, interweave and co-evolve?

From 3rd person perspective:

- What should be included in a set (or matrix) of indicators to be developed for marking stages on the individual We line of development?

- What specific research design would best support the exploration of the questions above?

COLLECTIVE BUDDHA

It is probable that the next Buddha will not take the form of an individual. The next Buddha may take the form of a community, a community practicing understanding and loving kindness, a community practicing mindful living […] And the practice can be carried out as a group, as a city, as a nation. This may be the most important thing we can do for the survival of the Earth. – THICH NHAT HANH, 1994.

We may intuit that Thich Nhat Hanh is right here, but how, in the first place, could such a group come into being? That question has been working on me ever since I've read his book. I came to an initial insight that collective awakening might start with experiencing some fleeting moments of it.

Ten ears ago, I posted on Zaadz, a now-defunct online network: "Our steady attention to what is moving us in the luminous moments of co-inspiration transforms the fleeting experience into continuous celebration of the awakening of the collective learner to its potential for higher intelligence and wisdom. That is also a potential for holding more compassion and complexity."

As we travel on the path of our life's journey from me to we, occasionally, we meet others with similar sensibilities and inspirations. Sometimes when that happens, we feel our souls surging towards each other. What pulls us together can be way more than personal sympathy.

You might have read this popular quote from Pierre Teilhard de Chardin before, but now I ask you to reflect on its relevance to your experience: "There is almost a sensual longing for communion with others who have a large vision. The immense fulfillment of the friendship between those engaged in furthering the evolution of consciousness has a quality impossible to describe."

If you have found 'communion with others who have a large vision,' how have you been nurturing it? What did you learn from it? If you have answers to those questions, keep them in mind as you go on reading the rest of this section.

Another story that tells about that 'quality impossible to describe' is the story of the 'imaginal cells:' "A long string of clumping and clustering imaginal cells, all resonating at the same frequency, all passing information from one to another there inside the chrysalis.

A wave of Good News travels throughout the system - Lurches and heaves… but not yet a butterfly.

Then at some point, the entire long string of imaginal cells suddenly realizes all together that it is *Something Different* from the caterpillar. Something New! Something Wonderful!!… And in that realization the birth of the butterfly bursts forth! (http://bit.ly/2s6Q5Mn).

Since the butterfly now "knows" that it is a butterfly, the little tiny imaginal cells no longer have to do all those things individual cells have to do. Now they are part of a multi-celled organism – *a family* who can share the work. Each new butterfly cell can

take on a different job. There is something for everyone to do. And everyone is important. And each cell begins to do just that very thing it is most drawn to do. And every other cell encourages it to do just that." (Huddle, 1990).

I know many people, who participate in building the body of the 'social butterfly', but it's only with a few that I connect in the way of the "clumping and clustering imaginal cells". That's a good sign, because it is the consequence of the beginning differentiation of the clusters by their function, their distinctive contribution to the emergent social body. And beyond the fondness I feel for many special friends, I feel some extra excitement when I'm talking with those, with whom I also share a common function in one of the organs of the butterfly.

There are a growing number of personal accounts describing the emergence of collective wisdom in groups. This is one that caught my attention:

"Participants suspend their individual strategies and begin to sense into the rhythm of the group. This requires a different set of skills and competence than an approach that is solely individual or analytic. It is more like a jazz musician sensing the openings and transitions in the flow of the music. Rather than the punctuated sounds of individuals' punching out their numbers, a noticeable quiet settles over the group. Individuals begin to sense a different energy in the room and pay attention to a different part of themselves. In the language of collective wisdom, they sense what is arising among them in the immediacy of the moment." (Briskin, Erickson, Ott, Callanan, 2009).

Initially, such moments are transitory and short-lived. Having had a chance to experience them in both spiritual and business groups, I became passionate about discovering what it may take to sustain their momentum over time, and even when we are not together in the same physical space. Writing this essay, I want to share what I have discovered so far, and move the edge of this quest forward, hopefully joined by you.

What became obvious is that growing our muscles of the sustained shared-attention to help the initial fleeting moments turn into collective awakening requires practice, practice, and practice. I wrote about "shared mindfulness" practices extensively in *Spanda Journal* (Pór, G. 2014b) and *Huffington Post* (Pór, 2014d), and there have also been many messages by other practitioners in the Mindful Together community that I started on Facebook, and the Collective Intelligence, Collective Intelligence, Collective Wisdom community that I convened on Google Plus and now has almost 3,000 members.

Those are places where you can find references to practices that may start preparing you to find or attract, and participate in groups of collective awakening, but if you also want to find a community engaged in more advanced practices, I suggest that you look up the work of such teachers of evolutionary spirituality as Thomas Hübl, Patricia Albere, or Craig Hamilton.

In a conversation with Craig Hamilton, published in *Spanda Journal* (Hamilton, 2014), I said: "I have a living inquiry into the possibility of stabilizing that collective state of consciousness that, Craig, you described as 'one mind' […] We have hardly any notion, any experience of collective awakening that goes beyond a satori-like collective high, which is only a momentary experience... For the sake of any kind of coherent collective accomplishment that is making a difference, not only for the participating individuals but for a larger system, it would be lovely if we could find out what it will take to stabilize those states."

Craig replied, "when you talk about stabilizing anything, inevitably, the conversation turns back to practice and what you are doing over and over again. So the practice in this case would be doing more of that - all of these collective awakening practices very consistently with the same group, I would say […] And now the individual starts to really have a very concrete new self-structure that's emerging, that's really beyond what has come before. It's not just the out-flowing of what's come before. And that starts to become a more interesting self to be than the one I used to be, and so there's this total shift in orientation that the person can now hold because they've got enough practice standing there together with others. I think that 'together' part provides an immense support for stabilization."

It's a vivid reminder that no matter how many books and articles we read (or write) about collective enlightenment or awakening, only the direct experience of it in a real community, even in a temporary one, can give us a taste that will make us yearn for it until we become lucky enough to find our tribe.

The smallest unit of a real community that can have a shared mind and a shared heart is a deep friendship between two people. When the bond of mutual support is growing between us, something else is happening too. Through our connection, new grooves get carved that join the networks of relationship, which surround each of us and allow for more frictionless flow of mutual value in the form of information, energy, trust, and caring. The circle of care may extend from two to involve others. Depending on where we are on our developmental journey, its radius may go beyond caring for each other to include caring for the planet, for the evolution of our communities, society, and consciousness itself.

The new grooves that I mentioned are like the new paths we built in our garden, edged by beautiful, smooth river stones. Before that, there was just weed growing randomly in its place. Shortly after we built it, it became a novelty and a joy to walk on. Now it's just part of the landscape and feels as if it has always been there.

The well-worn pathways in the networks of mutually supportive relationships evoke the image of "hundreds or thousands neurons firing in a unique pattern… The more often a particular pattern is stimulated, the more sensitive and permanent are the connections between the neurons in the pattern. This process of memory formation is summarized by the phrase 'neurons that fire together, wire together'[10]." (Cohen, 2006) Applied to the neurons in the global brain, we form memories of a better future, as we respond together to what it is asking from us to do today.

When recurring interactions wire evolutionary agents together, they have a chance to prototype evolutionary learning communities, or Foundational Communities of Inquiry characterized by an "ongoing, experiential and empirical research on relations among spiritual/intuitive *visioning*, theoretical/practical *strategizing*, timely *performing*, and assessing *outcomes* in the visible, external world." (Torbert, 2004). Indeed, collective awakening, in the sense I use the term, cannot be accomplished without the group's engaging with the real-life challenges of a system larger than itself and contributing to meet them.

When such communities are committing to discover and realize their evolutionary purpose, in terms of their unique gift to a next-stage world, only then can they awaken their "collective Buddha" essence of an evolutionary learning and teaching community. Teaching more by their being and doing than by distributing knowledge.

A community awakened to its fuller potential is not necessarily composed only of illumined individuals. It does not require a critical *mass* of them, only a critical *connectedness* among those, who can sense that potential and feel called to act on it. It takes a small group to hold and nurture that potential for the larger group.

That leads us to the question, what are the functions of these collective entities that have started to appear on the horizon? They are almost as varied as the motivations and talents of people initiating them. Some of the functions that can already be observed, which those groups are exercising, include the healing of collective traumas[11], evolutionary entrepreneurship[12], serving as collective sensing and meaning-making organs[13], evolutionary mentoring[14] and leadership development, and more.

COMPETENCES OF A COLLECTIVE BUDDHA

What are the common competences that may characterize the emergent groups that perform "collective Buddha" functions"? First, what we mean by "competence" when we consider it as an attribute of not an individual, but a collective?

The main difference is that it's a moving and evolving, synergistic set of multiple, interconnected behaviors, that appear in response to specific situation. Collective competences manifest through participation and their result is a joint achievement that cannot be attributed to any member of the group.

The common competences of groups in a collective awakening stage include:

- Sensing and assessing collective fields and moods, both their own and the ones surrounding them.
- Listening for and to their evolutionary purpose and prioritizing actions that are on purpose over those that are not.
- Cultivating their community knowledge garden and stewarding their collective intelligence.
- Integrating different tools, methods and practices in response to the requirements of emergent situations.
- Being comfortable with uncertainty and ambiguity.
- Engaging in collective self-reflection frequently and judiciously.

Exercising those competences creates new grooves in the network of relationships of awakening communities. It is also "an expression of the evolutionary impulse moving through/as us[15]," the very same as that enlivens "organizations inspired by the next stage of human consciousness" (Laloux, 2014). We will explore the latter in the section on Wisdom-Driven Enterprise.

GENERATIVE ACTION RESEARCH QUESTIONS FOR THIS SECTION

From 1st person perspective:

~ If attention follows intention, then what specific practices help individuals to translate a shared evolutionary purpose into behaviors of sustained shared-attention?

From 2nd person perspective:

~ How does the purpose of the various roles that one plays, as the creative self-expression of his/her life force, integrate with the evolutionary purpose of the collective?

~ What markers/indicators of awakened groups can be used for detecting the early signs, and mapping the genesis collective awakening?

From 3rd person perspective:

~ How could a taxonomy of injunctions and practices be clustered in a few categories for supporting the development of a pattern library based on them?

~ What affordances do knowledge and collaboration technologies need to have and be optimized to support digitally mediated mutual awakening?

~ What research methodology could validate how generalizable these observations are, and discover what new questions we should ask about the collective Buddha?

WISDOM-DRIVEN ENTERPRISE

Few words have a longer historical association with leadership than wisdom, and few have less credibility in that association today. – PETER SENGE.

My quest for unleashing the synergy of transformative work on self, groups, organizations, and social systems got a major boost in 2014, when I read Reinventing Organizations: A Guide to Creating Organizations Inspired by the Next Stage of Human Consciousness (Laloux, 2014). Senge's "Fifth Discipline" and Laloux's book are two milestones on the "organization design" trajectory of deepening wisdom and collective awakening. Laloux's book is focused on the organizational instance but its implications don't stop there. See what becomes visible when we zoom in and out of that scale, here http://bit.ly/2quoy6o (Pór, 2015).

A key tenet of the book is that human development happens in stages, and so does the development of organization design paradigms. For mnemonic purpose, those stages are color-coded and the next one that has just entered the world scene is called Teal. Organizations at that stage are perceived as living organisms characterized by three breakthroughs: evolutionary purpose, self-management, and wholeness. Each of those three breakthroughs was present in the organizations that Laloux researched, and each of them contributes to the emergence of the wisdom enterprise.

In organizational and societal contexts, "wisdom refers to our effective use of intelligence, as evidenced by our capacity to alleviate suffering and increase joy in human and organizational systems. As Verna Allee noted in *Knowledge Evolution*, 'Wisdom tells us what to pay attention to. Wisdom is the truth seeker and pattern finder that penetrates to the core of what really matters.' Systemic wisdom can help with intuiting the long view, understanding systems in the context of their larger whole, and anticipating future crises" (Pór & Molloy, 2000).

Wisdom has many definitions. One of them, which is both operational and particularly relevant to the current section is this: Wisdom characterizes any factor that facilitates greater positive engagement with more of the whole (Atlee, 2004). Let's see how the three Teal breakthroughs, discovered by Laloux, contribute to the emergence of organizations that facilitate a greater positive engagement of more people with more of the whole.

EVOLUTIONARY PURPOSE

What constitutes an evolutionary purpose is the organization's greatest gift to the world. What that purpose is cannot be given by the founder or decided by the Executive Committee. It has to be discovered and listened to. The highest potential contribution of the organization (as a living organism) to its surrounding social ecosystem needs to be cultivated and expressed through everything that the organization does. How can a purpose perceived in this way enhance the wisdom of the organization?

"The shift to Evolutionary-Teal structures, practices, and cultures liberates tremendous energies that previously were bottled up, unavailable. And with the shift to Teal, these energies get harnessed and directed with more clarity and wisdom toward productive ends…. If we believe that an organization has its own sense of direction, its own evolutionary purpose, then people who align their decisions with that purpose will sail with the wind of evolution at their back" (Laloux, 2014).

Whether an organization can or cannot have its own sense of direction, its own evolutionary purpose, is not only a question of beliefs, but also of values-defined world-views. Through their different lenses, dominant narratives and metaphors people see very different organizational realities. For example, those who think of organizations as a machine cannot see them as living organisms with their own purpose independent of what their owners or members want it to be. That issue is hotly debated among practitioners of

organizational transformation and on the pages of Enlivening Edge at http://bit.ly/2s6M3n7.

SELF-MANAGEMENT

Workers self-management was first suggested by Karl Marx's famous statement that the "workers' emancipation can only be accomplished by the workers themselves". It has re-emerged in the "workers control" practices of the 1950s in Yugoslavia, Chile, Bolivia, Peru, and the Action Research and Organization Design work of Emery and Trist.

When people are liberated from the straightjacket of stifling job descriptions and free to play in as many roles as they want (including those that they would create for themselves through their self-management structures and processes), then their creative energies can engage with more of the organization as a whole.

The careful development of those structures and processes is pivotal to the success of self-management, as are people being trained in using them. When those conditions are met, the organization is deepening its wisdom. One of those conditions is the visibility of the organization, as a whole to its members and vice versa. There's a term for that, "holopticism" defined as follows.

"From the Greek roots *holos* (whole) and *optikè* (see), holopticism means the capacity for an individual to see the whole as a living entity in the collective in which he/she operates. Sports teams and jazz bands operate in a holoptical context because each player perceives the team as a whole and knows what to do… because he/she gets informed by the whole. Actions don't need to come from a blind chain of command. Individual and collective actions emerge at crossroads of rules and agreements, player's roles, individual personalities and styles, the current configuration on the field. Every individual action modifies the whole, which in return informs the player about what to do next, and so on. An unceasing feedback loop allows for the individual and the collective to communicate with one another." (Noubel, xxxx)

Laloux describes self-management as an enabler of that way of organizing work: "Harnessing and directing energy with more clarity and wisdom […] through better sensing: With self-management, every colleague can sense the surrounding reality and act upon that knowledge. Information doesn't get lost or filtered on its way up the hierarchy before it reaches a decision maker" (Laloux, 2014).

No doubt, if members of an organization share an evolutionary purpose and a common appreciation of how the whole works, and their actions influence that, then and only then can they truly self-organize and make both their actions and the whole wiser. However, what neither Laloux nor Noubel accounts for is the complexity of modern organizations that makes holopticism a desirable but far from trivial achievement. Self-management cannot reach its fuller potential and make the organization wisdom-driven if it doesn't account for the different nature of *dynamic*, *generative*, and *social* varieties of complexity (Kahane, 2004).

We talk about *dynamic* complexity when there's a lag in time and space between the actions/events (causes) and their social impacts (effects). That's the case of many situations, particularly in large organizations, which systems thinking is trying to address, but with limited success. Efforts to balance the "here and now" with the "there and then" are hampered by the distance between the two (in time and space), which is growing proportionately with the size of the organization.

For self-management to succeed, it needs to develop the structures and processes that supports systemic wisdom (Pór & Molloy, 2000), and systems intelligence: the integration of systems thinking and engineering perspectives with human sensitivity and the systemic impacts of emotions and intuition to produce a holistic appreciation of the situation.

Situations of *generative* complexity are characterized by higher unpredictability because they unfold from factors that are still emerging and changing. Plenty of organizational situations fall into that category. *Social* complexity compounds the challenges of *dynamic* or *generative* complexity with the factor of different stakeholders of the situation having differing values, goals, and narratives. A self-management structure is wiser if it has the capacity to absorb and manage not only dynamic or generative, but also social complexity.

While scientific analysis may lead to satisfactory results in dealing with dynamic complexity, it is less effective when faced with generative complexity, and clearly insufficient for addressing social complexity. The latter calls for understanding and applying the design principles of the intelligent organization (McMaster, 1997), which include: the organization is a network of conversations; learning emerges from an interplay of the whole; and sophisticated, systemic organization of collective intelligence emerges only from multi-stakeholder dialogues.

Following those principles, complexity-ready self-management is maximizing the reach and connectedness of relevant conversations and their enabling infrastructures. It also means that if you aspire to be a wisdom-driven organization, then "learn to generate, facilitate, and connect a network of productive conversations in virtual and physical environments. Hire or invest in the education of professional community architects, information designers, and knowledge gardeners.

Redesign your social, knowledge, and business architectures to optimize them for diversity and connectivity. Configure them so that they can reap the most benefit from the extra leverage and momentum that emergent technologies can offer." (Pór & Molloy 2000).

WHOLENESS

If wiser organizations are to facilitate a greater positive engagement with more of the whole, then they must start with supporting the wholeness of their members. What does that mean? "In Teal organizations extraordinary things begin to happen when we dare to bring all of who we are to work. Every time we leave a part of us behind, we cut ourselves off from part of our potential, of our creativity and energy. No wonder many workplaces feel somehow lifeless. In wholeness we are life-full. We discover in awe how much more life there is in us than we ever imagined. In our relationships with colleagues, much of what made the workplace unpleasant and inefficient vanishes; work becomes a vehicle where we help each other reveal our inner greatness and manifest our calling." (Laloux, 2014).

Teal organizations are engaged in ongoing inquiry and a variety of practices designed to support the wholeness of their members. Both through my consulting and publishing work, I have the good fortune to know some of them closely. For example, one of those next-stage organizations, a social enterprise in the UK healthcare sector, has been using mindfulness to develop their capacities to listen to what matters to them and their communities, and discover the organization's evolutionary purpose. They have a spacious quiet room that they call "The Meadow" where they hold meditation sessions and yoga.

They are not alone in creating reflective spaces. "Many organizations researched for this book have set up a quiet room somewhere in the office […] This practice opens up space for individual reflection and mindfulness in the middle of busy days" (Laloux, 2014). Such practices also exist higher education, as reflected in the conferences of the Association for Contemplative Mind in Higher Education[16]. In my own practice as academic, it goes back to the 1970's when I frequently my sociology classes at the University of Paris, by taking my students to the woods surrounding the campus, where we sat down under a an old oak tree to start the class with meditation. Later, in 1990s, when I was teaching organizational learning in San Francisco, at the California Institute for Integral Studies, the students brought small congas and drums, and we started each class with a 5-10 minute drumming session.

When the organization's structure, culture and processes enable and inspire its members to come to work with all of their talents, challenges, and aspirations, then they bring more life to it. Then the organization becomes more embedded in the web of life and awakens from the slumber of a soulless institution into its fuller potential as a place of social, economic, and developmental value for its stakeholders and members.

The wisdom-driven enterprise that inspires wholeness, expresses an evolutionary purpose, and runs on self-management, is not the matter of wishful thinking by starry-eyed visionaries anymore. There are hundreds of innovators building a "next-stage organization," followed by thousands of early adapters experimenting with one or another feature of it. Read the stories of some of them here at http://bit.ly/2rxgB4q .

Each of the three Teal breakthroughs contributes to make the organization wiser and awaken to the fullness of what it can become. However, their greatest impact comes from cultivating them jointly, focusing on high-leverage actions in the sweet spot, where the three connect. The following (fictitious) vignette illustrates an example.

Our Circle elected a Lead Link for the next year, whose Accountabilities include setting priorities and strategies. (Of course, she is using the Advice Process to enhance her wisdom around this with the one of the Circle.) We're a startup transformation agency focused on facilitating radical innovation in organizational structures and cultures. We want to walk our talk and know that we couldn't properly support our clients (that we call "learning partners") in discovering their evolutionary purpose, unless we find our own.

We are at a meeting of the Circle, which we convened especially for having our company's evolutionary purpose reveal itself to us. The Teal Mentor is introducing a warm-up exercise. It's a guided meditation in which we are meeting our wiser, future self who is 10 years older than us. Our younger self can have three questions to ask from him/her.

My first question is: what was my gift that I brought to the world, which has a large-scale positive and

lasting impact? Suddenly, I changed role and now, I am the wiser, older guy sensing into the realized potential of the younger one. I breath deeply and slowly, and with each exhale I go deeper in my innate knowing. When I share what I see, my younger self grabs a pen and starts writing his journal.

The exercise is over and we return to the circle. The Teal Mentor speaks: "Treasure what you discovered, and also, your muscle of deep intuition that you've just strengthened. You will need it. In the next exercise, you will read the headline of a story reporting on the success of our company, in the 10th anniversary issue of the Enlivening Edge magazine. What does it say and what strikes you about it?

We return again to the circle, and share with each other what we brought back from the future. As we talk about those magazine headlines, the threads of some of the stories start weaving together… The evolutionary purpose is slowly emerging like a picture on the photo paper in the darkroom's developer… The chemical in the developer, in our case, is the good chemistry between us, which inspires us to listen with great curiosity to each other's "future" stories, and fire up our imagination about what these stories can add up to.

For now, we have a shared clarity of the agency's purpose. It may change over time, and based on what we heard from other companies "going Teal," we know that most likely, it will. For now, this is the one that helps sharpening the purpose of each role serving that greater purpose. The meeting is over and we go down to our friendly neighborhood pub to celebrate the purpose that just found us, with a bottle of champagne.

GENERATIVE ACTION RESEARCH QUESTIONS FOR THIS SECTION

From 1st person perspective:

- What factors motivates individuals operating at different stages of development for wanting to have an overview of the enterprise's operations?

From 2nd person perspective:

- Can the fuller meaning of the "evolutionary purpose" distinction be communicated to those whose primary reference is not evolution?
- How to include the wisdom of those who do not seem to fit the emergent new culture of the organization?

From 3rd person perspective:

- What are the functional characteristics of leadership in the wisdom driven enterprise?
- How can the development of an organization's wisdom be assessed operationally if it is defined by "facilitating its members' greater positive engagement with more of the whole?"
- What tools and methods are used in next-stage organizations for democratizing complexity by visualizing it and the impact of individual actions on the whole?
- How to create pattern libraries organizing and portraying wisdom-inducing practices worth replicating in the domain of each of the evolutionary breakthroughs, which would support their findability and uptake.

AWAKENING TO A WISER SOCIETY

Taking things to scale doesn't happen vertically through one-size-fits-all replication strategies, although this is today's dominant approach. Change happens as local experiments move horizontally through networks of relationship, scaling across communities and nations. People become inspired by one another's discoveries and create their own initiatives; they also support one another as pioneers. – Margaret Wheatley and Debbie Freeze.

A "wiser society" may come into being when two things happen: a) large geographic regions have chosen a system of organizing work, commerce, and governance, where the realization of everyone's highest potential is the priority of the whole, and b) those regions found a way to coexist with other regions still under the logic of profit maximization for private interest.

Presently, "wisdom" is mentioned on 343,000,000 webpages, we have academic departments dedicated to wisdom research, several "Wisdom Universities," and one where you can even get a PhD in Wisdom. The "wisdom" meme inhabits the management discourse and philosophers write about the coming era of the wisdom society. Does that mean that we're getting any closer to a wiser society? Yes and no.

No, because writing or talking *about* wisdom is not the same as writing or talking *from* it. Yes, because there's no smoke without fire and the smoke screen of popular "wisdom" discourse cannot hide the burning desire in our soul for living a more coherent life, with fewer distractions, in a wiser society, in which all are caring for the whole and the whole is caring for all.

"We see the beginnings of a social movement, grounded in wisdom, percolating up through social networks in the business world, nonprofit organizations, government agencies, and cross-cultural affiliations […] Collective wisdom […] is marked by an experience of deepening connections: within ourselves, with each other, and to larger natural forces involving nature, spirit, and our place in the cosmos." (Briskin, Erickson, Ott, Callanan, 2009). The yearning for such experience of deepening is also fuelled, by the epidemic of disengagement at work, and the various movements for replacing work organization that engenders alienation with self-organization that ends it.

But, it's also true that "evolution on Earth will not advance beyond a certain point unless it is driven consciously and intentionally. If the transition to intentional evolution does not occur, evolution on this planet will stall, and humanity will not contribute positively to the future evolution of life in the universe – we will be a failed evolutionary experiment... Conscious organisms will need to envision the planetary society and design strategies to get there. If it is left to chance, it will not happen […]" (Stewart, 2008).

Why not? Mainly because our various interwoven global crises aggravate each other creating a devolutionary spiral. Their cross-impact is unpredictable and risks triggering a "perfect storm," a combination of circumstances that can drastically worsen the life conditions for millions of people.

There are international think tanks, agencies, and foundations focusing on humanity's strategic challenges, e.g. climate change, terrorism, hunger, nuclear security, health in poor countries, refugee and migrant crises, etc.

"Those international organizations play significant roles in developing holistic perspectives of the global problematique, institutionalizing new areas of concern and new constituencies, defining the issues that constitute the collective policy agenda, and expanding the collective knowledge base to facilitate appropriate decisions. Yet the existing structure of the world system conditions and shapes the character, and circumscribes the limits, of this intervention […]" (Ruggie, 1980).

Searching for breakthroughs that can lay foundations for creating the material conditions of collective awakening at a global scale, I studied the work of four leading international organizations that apply collective intelligence to address the complexity of global problem solving. They are the Centre for Effective Altruism, Copenhagen Consensus Center, Future of Humanity Institute, and the Open Philanthropy Project. None of them has the resources to address all global problems, let alone their complex interdependence. All of them are using some form of statistical analysis based on scientific evidence to prioritize the issues that they account for.

In spite the best intentions of some of their founders and funders, formal institutions alone are not able to cohere the collective will of the multitudes, which is necessary to find intelligent (social) life on Earth. Only movements of socio-economic innovations can do that. Movements such as open source, peer-to-peer, commons, and next-stage organizations, are transforming the planet into a mega-laboratory to test this hypothesis. Generative Action Research is particularly well-suited to empower them, since its main motivation is not simply problem-solving, but fostering social innovation at increasing scale.

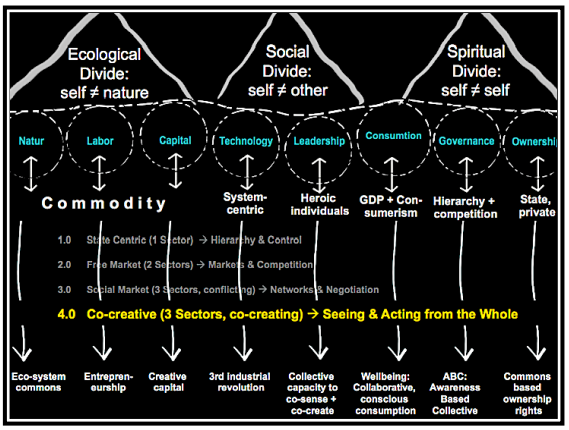
Once asked in an interview, whether "ensemble playing requires dividing your attention between what you're doing and what the group is doing, Bob Weir, guitarist and a founding member of the Grateful Dead, replied, "No, that's not it. Dividing your attention implies a separation between yourself and the music, where none exists. Actually, I am the music and all that's necessary is to maintain a little concentration, just enough to articulate my part so it blends with the whole." (Garbarini, 1981).

What will it take for organizations and movements with an evolutionary purpose to maintain a little concentration, just enough to articulate their part so it blends with the whole? The apparent simplicity of the analogy in that question is seducing, but we shouldn't forget that in the change of eras, the complex web of institutions to be reinvented needs both *spontaneous emergence* from the reinventors, and *deliberative design.*

What would that design look like? There are many systemic conceptualizations of a "more beautiful world our hearts know is possible" (Eisenstein, 2013) One of them requires "a threefold revolution: an individual, relational, and institutional process of inversion: "*Individual* inversion means opening up our thinking, feeling, and will so that we can act as instruments for the future that already wants to emerge. *Relational* inversion means opening up our communicative capacities, and shifting from a focus on conformity and defensiveness to generative dialogue, so that groups can enter a space of thinking together, of collective creativity and flow. *Institutional* inversion means opening up traditional geometries of power that are characterized by centralized hierarchies and decentralized competition, and re-focusing institutions around co-creative stakeholder relationships in eco-systems that can generate wellbeing for all. Fostering these inversions requires new types of innovation infrastructures that can build collective leadership capacities on a massive scale." (Scharmer, 2013)

In his latest book, Scharmer goes beyond that very high-level analysis and provides a more detailed picture the conditions for awakening to wiser society, which he brands as "8 Acupuncture Points of Transforming Capitalism to 4.0". He is advocating for an economic science performed with the mind of wisdom, and the suggestions of his model are certainly reflect that. The suggested shifts (from nature as commodity in

the current system to nature as an ecosystem commons; from state and private ownership to commons-based ownership rights; or from leadership as heroic individuals to collective capacity to co-sense and co-create) are all pointing to a wiser society. And it's not the dream of a utopian thinker but the expression of the best of living movements that inspire and are being inspired by the multitudes.



Collective awakening at a societal level, which Scharmer labeled on the diagram above as "Seeing and Acting from the Whole," is about our maturation into a wiser society. A wisdom society is also a caring society, where we'll have learned the master code of the human hive (Pór, 2012): taking care of oneself, taking care of each other, and taking care of this place. Caring for all by the whole is also a measure of collective sentience (Pór, 2014b), yet another indicator of our collective awakening. Given the enormity of changes involved with us as individuals, communities, organizations and societies learning to see and act from the Whole, we can't become a wiser society without first becoming a learning society.

What do we need to learn and how can the Teal breakthroughs help with that? One of the most critical competences to develop, from the perspective of moving towards the tipping point is creating greater synergy in what is already moving. "The larger social structures are proving to be inadequate to solve the problems they're creating. New social innovations are emerging everywhere, but they are not sufficiently connected or empowered. So right now, any effort that we can make to connect and create greater synergy and participation in this awakening process is probably the most important thing we can do." (Marx Hubbard, 2003).

So, how can we create the much-needed greater synergy? The response of traditional social movements, still caught in a kind of collective ego and wanting to ensure their hegemony, is to scale *up*. Scaling *across* seems to be the response by those who are ushering in a new logic of organizing work and society.

Scaling across happens when tens of thousands of people in different organizations, countries, sectors, and movements, start paying attention to similar possibilities for reinvention, connecting with a similar intention, and learning from each other's experience. The social field that their shared attention engenders is like the tide: when it comes, it lifts all boats.

"My news for 'world-savers' is that they don't have to save the world. New, more evolutionary forms of governance are already slowly emerging, or at least being experimented with, in every area of social life. Just look at the example of the road transportation system (http://bit.ly/2qz3RW4). Or, thinking of reinventing *economics*, consider already the emerging phenomena such as Platform Economics (http://bit.ly/2qz5aEx) the gift economy of Open Source Everything (http://amzn.to/2rcHvf7), the rise of Commons-based Peer Production (http://bit.ly/2qs5QA9), or the Sharing Economy (http://bit.ly/2rxEQQ8), just to name a few.

We cannot only *zoom in* from the organizational scale reinvention to the individual scale, but also *zoom out* to the societal scale. That's because Laloux's discovery is a foundational pattern of *social* evolution, not only of *organizational* evolution." (Pór, 2015).

That they are seemingly unconnected, or even fragmented expressions of this epic shift, the change of eras, is particularly frustrating for those who'd like to see all change initiatives marshaled into one coherent stream (preferably, under their own leadership). While in the past, a center of one innovative ideology (e.g. the Encyclopedists of the French Enlightenment or Marxist International) could scale up to worldwide impact, in the conditions of the 21st century VUCA world, it's more likely that the coherence necessary for civilizational change will grow out of the co-evolution of the work of many innovations centers scaling across.

THE MACRO-TO-MUNDO EXPANSION OF THE EVOLUTIONARY WAVE

What insights gleaned from the principles and practices of reinvented organizations are worth revisiting

when we need to reinvent larger social systems? We, organization re-inventors need to ask ourselves that question to check that we're not creating happy islands of reinvented organizations in oceans of sorrow.

One of the key discoveries from my working with many organizations is that to make the transformation of a traditional organization into a Teal one relatively pain-free, it needs to be guided/facilitated by some people acting from the "WholeView" perspective of Turquoise Consciousness (http://bit.ly/2qyUQMQ). The same dynamics probably also apply to the larger scale of the awakening process.

"The next leap forward is to transcend organizational thinking as we currently know it, and consider all of humanity as one interconnected ecosystem. This may be the consciousness, beyond Laloux's 'Teal' which will kick in when the over-simplification of seeing organizations as separate entities becomes insufficient to create human endeavors which can respond to an increasingly global, interconnected, and complex world." (Nixon, 2015).

Teal consciousness enables the replacement the positional hierarchies of people with the natural hierarchies of purpose organizational systems and subsystems, and to prioritize flexibility, functionality, and "sense-and-respond" coordination over plan-and-control. However, Teal doesn't go far enough when it comes to societal, let alone planetary changes. Then we need Turquoise consciousness that is just one notch higher than Teal. It gives us a holistic perspective, from which we can perceive the patterns that connect the whole of life, and our embeddedness in them. At that altitude, it is possible to tune our senses for receiving epiphanies of the emergent future in need of our wise decisions and actions today. Learning how to do that may help discover our evolutionary purpose at a scale larger than the self or even the organization. (Pór, 2015).

Laloux seems to point in the same direction when he writes, "It's conceivable that in the future the evolutionary purpose, rather than the organization, will become the entity around which people gather. *A specific purpose will attract people and organizations in fluid and changing constellations*, according to the need of the moment" (Laloux, 2014) – emphasis mine.

Parallel with more and more organizations going Teal, how can we prepare for the coming "macro-to-mundo" expansion of the evolutionary wave? That preparation is a two-step process.

First, we need to form in-house and cross-organizational communities of practice to observe which of the new structures and processes works best in what sector, document them, and take deep dive learning journeys, where we can cross-fertilize our experiences and what we are learning from them. One such group is the Teal Mentors Community of Practice, recently formed by the alumni of the "So, You Want to Become a Teal Mentor?" workshop of the Next-Stage World gathering of organization reinventors.

> "Wiser communities of practices strengthen the nervous system (the network of connected conversations) of the organizations hosting them. They can also draw on the intelligence of the wider networks of their profession, outside the organizational boundaries. Locally and globally connected communities both enhance and benefit from the dynamic interplay between the local and global scales of collective intelligence. An alternative to top-down globalization, those connections can enrich our lives and support us in the great work of healing dysfunctional local and global systems." (Pór, 2008b).

Second, we have to learn building multi-level vertical alliances and large-scale consultation processes. Action Research strategies and methods can be helpful with that, as the following quote illustrates.

> "By definition, large-scale change must happen at multiple levels […]Such change processes can be best aligned, to create new synergies with one another, to the extent that actors at differing levels learn to engage critically across power differences. For this to happen, mediating organizations, processes and networks that vertically cut across hierarchies are critical – but so too are processes of meaningful representation and voice from one level to another. While large-scale consultation processes begin to make this possible, transparency of how different voices are mediated, and by whom must be present." (Goventa, & Cornwall, 2001).

That's a fractal process, and whatever we learn at each level, it will be something that we may apply to other levels too. Engaging that multi-yield capability development, we bootstrap ourselves into the future.

EPILOGUE

Waves of pronoia are coming in, yet incredible amount of man-made, unnecessary suffering is still occurring every day, threatening with worse-case scenarios. What is our answer?

What is our answer that can seduce large numbers of lovers of beauty, truth, and goodness into the ecstasy of co-creation and numbers large enough to awaken the emergent collective intelligence and wisdom that humankind needs in this hour?

The liberation of our collective wisdom and sentience is a cosmic adventure game. The entry fee to it is an enlivened and enlivening heart.

GENERATIVE ACTION RESEARCH QUESTIONS FOR THIS SECTION

From 1st person perspective:

- What guidelines can be developed for individuals, who want to press some of Scharmer's 8 acupuncture points depicted in Figure 5 *and* have their intervention gain greater leverage through its cross-impact?

From 2nd person perspective:

- What qualities can we observe in "ensemble playing" social groups, which when extended over time and geography, they can galvanize the social field of transformation?

From 3rd person perspective:

- What social movements have a global strategy for building the next-stage world?

- What can it take to guide the development of social media for supporting collective self-actualization?

- How do some communities, organizations and social movements prefigure the wisdom society?

"There can be great adventure in the process of inquiry. Yet not many action-researchers today return from their explorations refreshed and revitalized, like pioneers returning home, with news of lands unknown but most certainly there. Perhaps there is a different root metaphor from which to work." (Cooperrider & Srivastva, 1987). I offer as the root metaphor for a different kind of inquiry the "generativity" distinction, as outlined earlier.

Awakening a sentient, self-actualized collective (Pór, 2014) is an expedition. Along the way, our center of gravity is shifting from "me" to an ever-expanding "we." We become a sentient collective when the age-old dream comes true: the whole for the well-being of all parts, and all parts for the wellbeing of the whole. If we make the trip successfully, perhaps we will uncover the impulse that moves the subsequent waves of evolution forward. Come and be part of this adventure: help by shaping the priorities of our Generative Action Research!

♦

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PETER RUSSELL

BLIND SPOT:

THE UNFORESEEN END OF ACCELERATING CHANGE

Peter Russell is on the faculty of the Institute of Noetic Sciences, and a fellow of The World Business Academy, and The Findhorn Foundation, and an Honorary Member of The Club of Budapest. At Cambridge University (UK), he studied mathematics and theoretical physics. Then, as he became increasingly fascinated by the mysteries of the human mind he changed to experimental psychology. Pursuing this interest, he traveled to India to study meditation and eastern philosophy, and on his return took up the first research post ever offered in Britain on the psychology of meditation. He also has a post-graduate degree in computer science, and conducted some of the early work on 3-dimensional displays, presaging by some twenty years the advent of virtual reality.

In 1982 he coined the term "global brain" with his 1980s best-seller of the same name in which he predicted the Internet and the impact it would have. His books include The TM Technique, The Upanishads, The Brain Book, The Creative Manager, The Consciousness Revolution, Waking Up in Time, and From Science to God.

As one of the more revolutionary futurists Peter has been a keynote speaker at many international conferences, in Europe, Japan and the USA. His multi-image shows and videos, The Global Brain and The White Hole in Time have won praise and prizes from around the world. His principal interest is the deeper, spiritual significance of the times we are passing through. His work seeks to distill the essence of the world's spiritual traditions and present it in ways relevant to the current times.

♦ ♦ ♦

WARNING: The following challenges one of our deepest held paradigms – our view of humanity's future and place in evolution. As a human being with an investment in the future of our species, you may find yourself profoundly disturbed and resisting its conclusions.

OVERVIEW

That humanity and the planet are in crisis is clear. Moreover, the severity of the crisis is now beginning to hit home. Recent reports suggest we are in the early stages of the sixth major mass extinction in Earth's history – this time caused by one of the planet's own species rather than an asteroid or comet impact – and if we do not change our ways radically and very fast, then we, along with many other species, will become extinct in a century or so. And it is our own fault.

At least that is the story we are told. Here I propose a new story of human evolution – not the kind of new story that many people are calling for in which personal and social transformation help us avoid immanent extinction and move on to a sustainable long-term future. In this radically different new story, there is no long-term stable future ahead of us.

We are coming to the natural end of our species' journey, spinning faster and faster into the centre of an evolutionary spiral. However fast we find the pace of life today, one thing is sure, twenty years from now it is going to be much faster, and twenty years after that much faster still, and twenty years after that… almost unimaginable.

Some look at where this acceleration is taking us technologically; to the so-called singularity when computers surpass human intelligence. We would then move into a new era of development unlike anything we have seen so far. But whatever may transpire in a post-singularity world, one thing is certain: The acceleration in the rate of development will not stop. Quite the opposite; it will leap upwards even steeper.

Herein lies our blind spot on the future. Continued acceleration is inevitable, and is winding us up faster and faster in a whirlwind of change from which there is no way out. Yet any notion of a long-term future for humanity implies the acceleration has ceased. You cannot have it both ways.

In addition, accelerating change puts ever-increasing stress on the systems involved – human, social, economic, and planetary. Stress stems from failure to adapt. And failure to adapt leads ultimately to breakdown of these systems.

Many of the crises facing us have arisen from accelerating development. Climate change, for example, stems from the fact we are burning fossil fuels thousands of times faster than the planet can reabsorb the CO_2 produced. And there are other equally dangerous crises waiting in the wings, each the failure to adapt to ever-increasing rates of change.

This new story is not, however, all one of doom and gloom. The impending end of our species in linear time does not preclude our fulfilling our destiny in exponential time. There could be as much development in the decades remaining as there has been in the whole of human history so far.

To explain how I have come to such conclusions, let us begin by exploring the nature of exponential change, and its counter-intuitive character.

EXPONENTIAL TIME

Five hundred years ago, there was little concept of progress. Time was measured cyclically – the cycles of days and nights, the moon, the seasons, the years, a lifetime. One generation lived and worked much as the previous generation. There may have been occasional innovations – a new horse harness, sturdier buildings, better food preservation – but generally the cycles repeated year after year, with little change.

With the advent of the Renaissance, the European Enlightenment, and the Industrial Revolution, change came faster. People could remember the days of their childhood, before the printing press, the steam engine, or the automobile. Progress was now an intrinsic part of life. We looked back to how things were, and forward to how things would be. Cyclical time had given way to linear time.

Today, technological breakthroughs spread through society in years rather than centuries. Calculations that would have taken decades are now made in minutes. Communication that used to take months happens in seconds. Development in every area is happening more and more rapidly. We look back now, not just to how things have changed, but also to how much faster things are changing. Linear time has been overtaken by exponential time.

THE NATURE OF EXPONENTIAL GROWTH

Exponential growth occurs whenever the rate of growth is proportional to the current size. In everyday terms; the bigger something gets, the faster it grows.

A common example is population. The more people there are, the more children are born. The more children that are born, the more parents there will be in the future, and the more children that will be born, and so on. If there are no constraints, the population keeps growing faster and faster, resulting in the familiar exponential curve.

Population growth does not follow a true mathematical exponential curve, which is defined as one in which the rate of growth is directly proportional to the current size. Other factors like health care, sanitation and resources also have an impact. In what follows I shall use the term exponential growth to mean an exponential-like growth – one that has a similar character to the true mathematical curve.

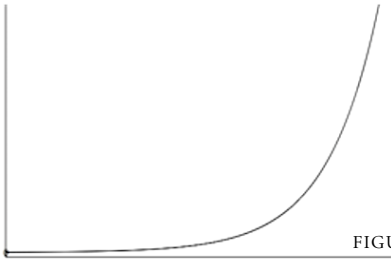


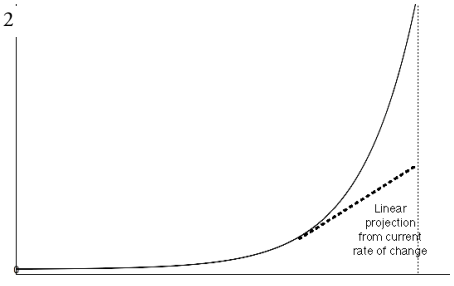
FIGURE 1

Although we are all well aware of the accelerating pace of change in our own lives, we find it difficult to think in exponential terms. You may have heard the story of the king who was asked for one grain of rice on the first square of a chess board, two grains on the second, four on the third, doubling each time till the 64th square would have how many grains? A mindboggling 18,446,744,073,709,551,615, about 45 trillion tons, a heap as high as Mount Everest – far more than most people intuitively expect.

Money invested at compound interest is another good example. A dollar invested at 10% would be worth $1.1 after one year; $1.21 after two years; $2.59 after ten years; $117 after fifty years; $13,781 after a hundred years; and around $2.473,000,000,000,000,000,000,000,000,000,000,000,000, 000,000,000 after a thousand years which is about ten trillion times the weight of the Earth in gold. (This is why any economic system based on the charging of interest is destined to eventual collapse.)

In a similar way, we fail to see where exponential rates of change will take us. When we contemplate the future 25 years from now we usually extrapolate the current rate of progress into the future. If so much change has happened in the last 25 years, then we imagine a similar amount in the next 25 years. In reality, it will probably take only 10 years or so to witness a similar amount of change. On paper we can perhaps take the acceleration into account. But not in our imagination. Linear time still rules our minds (FIGURE 2).

FIGURE 2



ACCELERATING EVOLUTION

The acceleration we experience in our own lifetimes has a long history. Change may be occurring much faster today than it did a thousand years ago – medieval architecture and agriculture, for instance, varied very little over the period of a century. But even then change occurred much faster than it did in prehistoric times – Stone Age tools remained unchanged for thousands of years.

Nor is this gathering pace confined to humanity; it is a pattern that stretches back through the history of life on Earth. *Homo sapiens* has been around for a million or so years. Mammals for more than fifty million years. Vertebrates with their central nervous systems, several hundred million years. Multicellular life a billion years. And simple cells nearly four billion years.

This acceleration in the rate of evolution is inevitable. It is a result of the same factors that lead population growth and money invested at compound interest to grow exponentially. The more progress there has been, the faster is future progress.

Take, for example, the emergence of sexual reproduction, some two billion years ago. Previously cells reproduced by splitting in two – into two clones of the original. With sexual reproduction, the genetic information from two cells was combined. Genetic differences now occurred in every generation, speeding evolution a thousand-fold.

Multi-cellular organisms were another great leap forward. Evolution was no longer limited to the creation of new types of cells – the muscle cells in a fish are not that different from those in you or me. New species could now evolve through reorganizing existing structures, which took much less time. The result was another speeding up of development. The awe-inspiring diversity of multi-cellular species that we see on Earth today evolved in just the last tenth of Earth's history.

WHAT IS ACCELERATING?

What do we mean when we say the rate of evolution has speeded up? Time has not speeded up. The Earth spins around the sun at the same speed. Clocks still tick at the same rate.

What has accelerated is the rate at which change has occurred – the rate at which new species have come into being, and the rate at which those species have evolved new characteristics. It is, to borrow a term from the philosopher Alfred North Whitehead, the rate of ingression of novelty into the world that is accelerating – the word "novelty" used here in its literal sense of "newness."

Each evolutionary innovation – literally, "bringing in the new" – has spawned further innovation. Novelty arises faster and faster, and the rate of development accelerates. Simply put, innovation breeds innovation.

AN INNOVATIVE SPECIES

With human beings an entirely new source of novelty emerged on the planet, and the rate of evolution entered a period of hyper-acceleration. If the whole of Earth's history were collapsed into one year, then human beings appeared in the last fifteen minutes, civilization thirty seconds ago, and the Information Revolution in the last half second.

This time, the leap in innovation lay with the human mind and hand, and our proficient use of tools. Tool use itself is not new; many animals use them in one way or another – crows that fashion a piece of wire to hook out food, sea otters that use rocks to break open shellfish, chimpanzees using twigs to "fish" for termites, orangutans making whistles out of leaves.

Five million years ago, when our apelike ancestors were at a similar stage of development as today's primates, we would also have been using various tools. The only evidence that has survived over time is stone tools; those made from organic materials would have decayed and left no trace. But this does not mean our tool use began with stones; we've been tool-users all along.

Our tools took off with the advent of speech. Innovations did not die out with innovator, but could become part of the group's knowledge to be passed down to others. We began to build a collective body of knowledge about the world and use it to make better tools. And we began to use tools to create new tools, leading to the birth of technology.

Speech brought other benefits. Words allowed us to think about our experience. We could form concepts, apply reason, and better understand the world in which we found ourselves. Thinking also expanded our awareness of time from the immediate present into the past and future. We could recall previous experiences, and learn from them. And we could imagine future events, judge whether or not they might be beneficial, consider alternatives and their consequences, and make conscious choices.

Combine tool use with this newfound ability to communicate, think, reason and make choices, and you have a creature able to mold the clay of Mother Earth into a diversity of new forms. We learned to create edges to our stones, giving us axes, knives and arrowheads. We built shelters for ourselves and made clothes. We tamed fire, which not only kept us warm, we could cook food, and smelt metal. We developed agriculture, sowed seeds, and irrigated

the land. We invented the wheel, developed new modes of transport, discovered new sources of energy, and created new materials. And we created better and better tools with which to do all these things, each development furthering future developments.

Our opposable thumbs, with their fine motor control, led to writing, allowing us to record the wealth of information we were gaining. And we did not stop at writing, we invented increasingly influential information technologies – from writing, to printing, telephone, radio, television, computers, and the Internet – each advancing our ability to share our experiences and accumulate the ever-growing body of knowledge that made so many of our technological advances possible.

We became a technologically-empowered intelligence, creating more effective ways to modify and control our world. And the more our technology developed, the faster it grew – that basic principle of exponential growth. Innovation bred further innovation, and the pace of change leapt forward at a dizzying rate.

APPROACHING A SINGULARITY

If there is any certainty about the future, it is that the pace of technological development, and with it the pace of life, will keep increasing. However fast things may seem today, the future is set to be much faster still.

Some futurists believe that ever-accelerating change will take us into a "singularity". This is the term that mathematicians give to a point when equations break down and become meaningless. The North Pole, for example, is a simple geographic singularity: How do you go north from there? Or east or west? And which way is south?

The idea that there might be a singularity in human development was first put forward by the mathematician Vernor Vinge, and subsequently by myself in *The White Hole in Time / Waking Up In Time*. More recently it has been popularized by Ray Kurzweil, who argues that if computing power keeps doubling every eighteen months, as it has done for the last fifty years, then sometime in the late 2020s there will be computers that equal the human brain in performance and abilities. From there it is only a small step to computers that can surpass the human brain. These ultra-intelligent machines could then be used to design even more intelligent computers. And do so faster.

Kurzweil calls this point in time the "singularity." It is not a true mathematical singularity, in which the equations of physics break down; it's an "historical singularity" in which the patterns of the past no longer apply. With ultra-intelligent machines an entirely new form of innovation will have emerged; it will be a totally different game. And as to what happens beyond the singularity, all bets are off.

Nevertheless, there is one thing we can say about a post-singularity world. The rate of development will continue to accelerate. Indeed, the emergence of ultra-intelligent machines will undoubtedly lead to a further explosion in acceleration. Within decades of passing the technological singularity, rates of change will become astronomical.

In most post-singularity scenarios there is an implicit assumption that development will continue into the following centuries and beyond. Yet it is a fundamental tenet of singularity-proponents that ever-increasing rates of development are inevitable. We can't put precise figures to it, but if, say, there were to be as much change in the next twenty years as the previous fifty, then after the singularity as much change again might be likely in the following ten. And then as much change again in perhaps five years. Within a short time, the curve becomes impossibly steep.

To suppose that human (or human-cyber) development will continue into the centuries beyond is once again falling prey to our instinctive tendency to think in terms of linear time. When we consider things from the perspective of exponential time, our view of the human future is shaken to its core.

OUR BLIND SPOT ON THE FUTURE

When thinking about our long-term future, some foresee a human-cyber sci-fi reality, others a world struggling to survive the ravages of climate change, some an ecologically sustainable society of enlightened beings, others foresee our becoming part of an interstellar community. Yet whatever scenario, utopian or dystopian, people assume that, barring some cataclysm, the human species will continue, on this planet or another, for thousands or even millions of years.

In imagining such futures there is the implicit assumption that rates of change are relatively static. Take the *Star Trek* scenario, for instance, set several hundred years from now. Technology on the *Enterprise* and back at Federation headquarters on Earth remains basically the same over time. But how could that be? Would innovation, the driving force behind acceleration, have ceased? There is every reason to suppose that science and technology would still be developing fast. Indeed, given the exponential nature of accelerating change, the pace would have become unimaginably rapid long before the *Enterprise* was launched – and even more rapid in the years thereafter.

The same is true with just about every other long-term vision of humanity's future. They are not set within a context of accelerating change. In most

cases, any development there might be is linear and slow, similar to pre-industrial times.

This is our bind spot on the future. By the end of this century the pace of development will be far, far greater than today's dizzying pace. In the century beyond it would be unimaginable. Hundreds of years beyond that, the curve would be off the charts. Like the growing mountain of grains of rice on the king's chessboard, it would be both way beyond our comprehension, and way beyond any feasible reality. On the other hand, when we imagine our species hundreds or thousands of years in the future, we make the implicit assumption that not only has the rate of change stopped accelerating, but any progress there might be is occurring relatively slowly. The two views of the future are inherently incompatible. You cannot have it both ways.

How does the natural exponential development turn into slow linear development? (FIGURE 3).

FIGURE 3

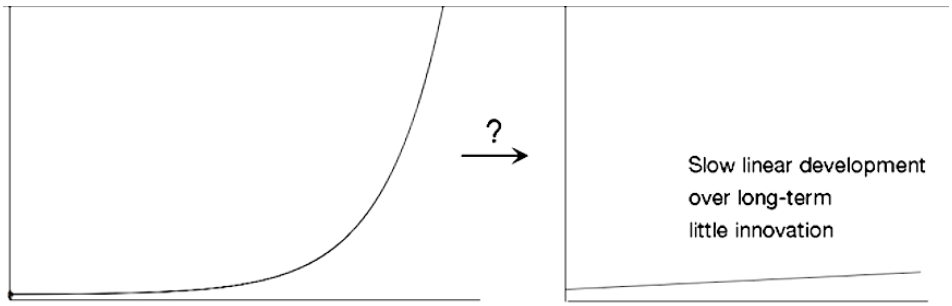


FIGURE 4

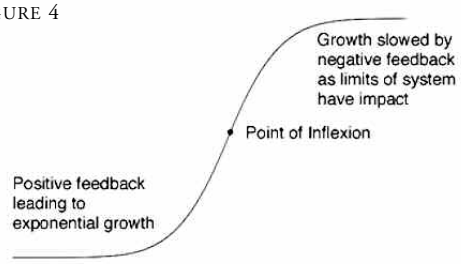
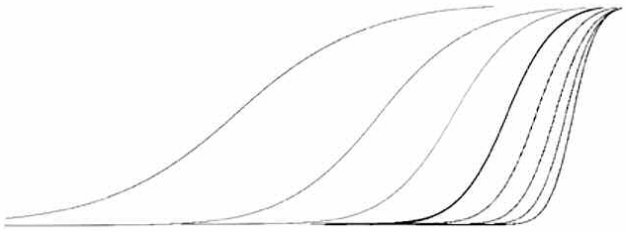


FIGURE 5



Thus anyone who imagines humanity hundreds of years from now must first explain how the acceleration of evolution, which has been going on since the dawn of life, will suddenly come to an end. All else is pie in the sky.

ARE THERE LIMITS TO EXPONENTIAL GROWTH?

When people begin to understand how ever-increasing rates of change preclude a long-term human future, they look for some reason why the acceleration will slow down, or even stop.

A frequent response is that no exponential process can continue forever. This is true. As any particular growth approaches its physical limits, negative feedback comes into play. The rate of growth slows and flattens out, producing a characteristic S-curve (FIGURE 4).

A simple example is bacteria growing in a dish. When the numbers are small, there are no effective limits to growth, and the cells multiply exponentially. Then, when they begin to fill the dish, there is less room for growth. The impending physical limits create negative feedback, which begins to hinder growth. Eventually, when the dish is full, the growth stops.

Recognizing that in practice, an exponential growth cannot go on forever, people assume that we will follow the same pattern, and the rate of development will slow and eventually flatten out.

There may well be limits to the rate of growth in any particular arena. Population, energy consumption, or urban expansion may each reach a limit and flatten out. However, what we are considering here is not just the rate of growth in any particular arena – such as population growth, oil consumption, or Moore's Law in computing – but the overall acceleration in the rate of change. The S-curves are getting steeper and coming faster (FIGURE 5).

IS THERE AN S-CURVE TO EVOLUTION ITSELF?

Another possibility is that there may be an S-curve to the overall rate of change. This would happen if there were limits to how fast change could occur. Such limits may well exist. But they would be limits to the rate of change itself – limits as to how much change the various human, social, and planetary systems could tolerate. As we approached those limits, the

acceleration would begin to slow down and eventually stabilize.

However, approaching such a limit would not mean that the rate of change itself would stop. It would be the acceleration in the rate of change that reached a limit, not the rate itself – a point that many people fail to grasp. Change would continue happening very fast – at the maximum possible rate. Imagine a steadily accelerating car; eventually it reaches its maximum speed and the acceleration stops, but not the car, which is still travelling at top speed. Similarly, even if the pace of change levelled off, we would still be living in an ultra-fast world. Hardly a sustainable limit.

CHANGING COURSE

Some argue that future technologies will free us from the need for material consumption. But it is not just a question curtailing this particular area of growth. Even if material growth were to slow to sustainable levels, innovation would not come to an end, nor would our development; it would simply move on into other arenas. We would find ourselves on a new, and even steeper, curve – one that may be as far beyond our imagination today as the Internet would have been to Galileo.

Others argue that the global crisis stems from a limited, ego-centric, materialist mode of thinking, which has led us to misuse science and technology in the service of greed, power and control. A shift in consciousness could lead to a new ethics focused on the good of the whole rather than that of the individual, helping us creates a more equitable and sustainable world.

It is most unlikely that that such a shift would ever be enjoyed by more than a select few; however, just suppose this scenario were to come true, would we then stop developing? Would the rate of change slow down to a comfortable, manageable pace? On the contrary, there is every reason to believe that innovation would continue. We might choose to apply our creative capacities in more sustainable ways, but the acceleration would not end. Innovation would still be breeding innovation. The rate of ingression of novelty into the world would still be increasing. We would still be spinning faster and faster towards untenable rates of change.

THE STRESS OF ACCELERATION

Singularity-proponents tend to focus their attention on the wondrous new technologies on the horizon: self-reproducing and self-repairing machines, human-cybernetic interfaces, brain enhancement, nano-tech medicine, DNA technology, reversed aging, 3D printed organs, etc. Entranced by the awe-inspiring promises of ever-more rapid technological development, they by-and-large fail to consider the downside of this acceleration, namely the stress it is putting on all the systems involved.

Stress is often defined as a failure to adapt to change. The more we have to attend to, plan for, worry about, and take care of – the more changes to which we have to adapt – the more likely we are to suffer stress, with its various negative consequences in terms of physical, mental, and emotional health, and its repercussions on family, friends, and colleagues.

Today the increasing pace of life and the demands of new technologies are becoming a growing stress. Many are finding themselves having to work longer hours, even weekends. In addition, there are new technologies to learn, more systems to upgrade, more information to keep abreast of, more time consumed on social media. The amount of quality time we can have with ourselves, family and friends, relaxing and recovering from the pressures of work is getting less and less, for some disappearing completely. As adaption to increasing change becomes harder and harder, exhaustion and burnout will become increasingly common.

But it is not only the people who are experiencing the stress of ever-faster change. Our social, economic, energy and environment systems are all being impacted as they fail to adapt to increasing change.

A CRISIS OF ACCELERATION

The crisis we are facing is, in essence, a crisis of acceleration. Clearly the human population explosion is the result of exponential-like growth. Thankfully, it is beginning to tail off, nevertheless the implications for food, water, housing, geo-politics, and other issues are major and growing.

Oil reserves are running out because we are now consuming it a million times faster than it was created. Similarly with many other resources whose supply is becoming critical – platinum, copper, zinc, nickel, and phosphorus, all of which are crucial for contemporary technology – will have run out, or be very limited, within a few decades. Yet our demand for them continues to grow, especially with the rapidly growing needs of developing countries.

On the other side of the equation, rapid growth in industrialization has led to an accelerating growth in the release of pollutants into the air, soil and sea. And they are being released thousands, or in some cases millions, of times faster than the planet can break them down and absorb them. Climate change, for instance stems from our accelerating

consumption of fossil fuels and the accompanying increased emission of carbon dioxide into the atmosphere. Normally the CO2 is absorbed by plants and the oceans, but we are now producing it hundreds of times faster than the these systems can handle. We might (if we really put our hearts and minds to it) avert the most damaging repercussions of climate change; but climate change is just one potential catastrophe. There are many others waiting in the wings.

I've already mentioned the inherent instability of any economic system based on compound interest. Another direct consequence of such systems is the need for continual growth in net wealth in order that the interest be repaid. A three-percent annual growth may be deemed healthy for a nation, but the impact on the planet of such growth, compounded over a hundred years, is devastating.

The acceleration has also promoted geo-political instability. Europe spearheaded the acceleration in scientific, technological, and cultural development. It then colonized other lands whose development in these areas was perhaps a thousand or more years behind. The dangerous consequences of this are now apparent in regions of the world that are still living with medieval customs and values, yet have access to modern weaponry, internet, and ease of travel. We are seeing not so much a clash of cultures, but a clash of eras – a clash originating in a mismatch in rates of development.

A system can only tolerate so much stress; then it breaks down. If a wheel is made to spin faster and faster, it will eventually break apart under the stress. In a similar way as rates of change get ever faster the systems involved will reach a point where they too break apart. Whether it be our own biological system, social, economic, and political systems, or the planetary ecosystem, the stress of ever-increasing change will eventually lead to breakdown. Crises will pile upon each other faster and faster, heading us into the perfect global storm.

THE GREAT UNRAVELING

Predicting the actual course of events is never easy. Nevertheless current trends point to some likely scenarios.

Climate will undoubtedly be a major factor. Scientists are now concerned that climate change may have reached a tipping point. Even if we were to stop all fossil-fuel burning today, global temperatures would continue to rise for decades, probably triggering a runaway greenhouse effect as the much more potent greenhouse gas methane is released from the tundra and deep ocean. The warmer the planet gets, the more methane is released, and the more the planet warms – the familiar positive feedback loop that underlies exponential growth.

The effects of climate change on the world's ecosystems will be profound, which will have a major impact on human civilization. As drought and heat turn large areas of arable land into desert, there will be widespread crop failures and famine like we have never seen before. In some regions, fresh water will become increasingly scarce, not only from drought but also from rising sea waters entering the water table. Increasingly severe storms and their aftermath will take a growing toll on human life. Prolonged extreme heat waves in regions with little water or air-conditioning would be devastating. Impoverished conditions will also increase the risks of failed states, providing fertile ground for conflict and terrorism. Mass-migrations will occur as millions seek to escape to places where they can survive, bringing major challenges for the regions to which people are fleeing. And it is not just the weaker states that will be affected. Sustained drought, food shortages, and other ramifications of climate change could provoke widespread public unrest in the developed nations.

Other crises, such as economic collapse, energy shortages and unprecedented natural disasters, could lead to widespread social breakdown and the rise of police states. Global conflicts will increase as food, water and other resources become increasingly scarce. Nuclear war remains a distinct possibility. Epidemics of drug-resistant bacteria, uncontrollable wild fires, biological and chemical terrorism, collapse of the Internet through hacking or cyber-war, increasing systemic chaos – all are possible. Doubtless some will happen.

And, more than likely, completely unforeseen events will take their toll.

PROLIFERATING PROBLEMS

Some people hope that we will be able to solve, or at least alleviate, the many problems descending upon us. After all we are an innovative species, and in the past have successfully applied ourselves to solving our problems. Could we not also apply ourselves to tackling the new problems now facing us?

But this is not as straightforward as it might at first appear. We are facing what the Club of Rome in its prophetic 1970s report, *Limits to Growth*, called "a global problematique" – a complex interdependent set of problems. Climate, over-consumption, food and water shortages, pollution, resources, banking, terrorism, mass-migration, disease all interact. A tremor in one can ripple through the others – a devastating hurricane shakes the insurance industry, impacting the stock market, investment, government and social

order. The problems need to be solved together; a Herculean task, even if it were possible.

Moreover, our past attempts to solve major problems often left bigger problems in their wake. The movement into towns and cities helped solved problems of supply and the division labor. But new laws and administration were required to keep order in the cities. And dealing with those who transgressed the laws created other problems. The more developed nations solved some of their supply problems by gathering resources from across the world, but this led to further social and political problems. Energy constraints were solved by burning fossil fuels. The unforeseen problems that this "solution" created are now plain for all to see. Now there is talk of geo-engineering to solve the climate problem; but what unforeseen, and even greater, problems might that create?

Meanwhile, forests are dying fast, to be replaced by concrete, wasteland, and desert. Species are becoming extinct as fast as in any of the great planetary cataclysms of the past. The air is toxic. Topsoil is blowing in the wind. Rivers run sour into the sea. The oceans are turning acidic. The once rich coral reefs are dying.

And the geopolitical ramifications are also building up. As I write, the recent US election is sending quivers across the world. Brexit has shaken the foundations of the EU. The European refugee crisis is a portent of bigger migrations to come. There is the pain and tragedy of the ongoing war in Syria. The fear induced by the rise of ISIS. The growing severity of internet hacks and cyber-war. They are all coming faster and faster.

We are witnessing the beginning of the great unraveling. The growing troubles filling the daily news merely reflect what it is like to be a technologically-empowered species spinning ever-faster into the eye of its evolutionary spiral.

NO BLAME

When we look at the many crises now facing us, and the very real possibility of our species coming to an end, we may ask when and how we fell from grace?

Some see it in the European Enlightenment of the eighteenth century when human activities took precedence over nature. Others in the Industrial Revolution, which triggered our burgeoning consumption of natural resources with its consequent pollution, and the ensuing revolutions in sanitation and health care that led to rapid population growth. Some see it in the oppression of indigenous cultures by colonialism. Or the legalization of usury and the charging of interest, leading to economies wedded to continual growth. Some see it in the advent of civilization and the movement away from the land to living in cities. Others in the demise of matriarchal societies and the patriarchal takeover of our culture, or in the loss of our indigenous myths and initiation rites. Some trace it back to the emergence of agriculture, when we moved from a hunter-gatherer lifestyle based on coexistence with nature to one in which the world was ours to control and exploit. While others argue that the root of the problem goes back even further, to hunting itself. Is it a coincidence, they ask, that many of the large mammals disappeared from the planet around the same time as humans developed the spear?

All of these undoubtedly played a role in our present-day woes. But it would be wrong to put the blame on any one of them. Our intention has always been to improve the quality of life. We have sought to free ourselves from pain and suffering, to live longer, healthier and more fulfilling lives. And there can be no blame for that.

It is natural that any intelligent tool-using species will seek to improve its lot in life and enhance its safety and survival. And natural that it would apply its ability to learn, to think about its experience, and to make choices, to its own benefit. It is equally natural to develop the knowledge and technologies that allow it to do this more effectively and efficiently. And as innovation built upon innovation, our techno-cultural development would inevitably have leapt ahead into a phase of hyper-acceleration, with all its unseen consequences.

In the final analysis, it is this hyper-acceleration that is intrinsically unsustainable. But unfortunately, there is very little we can do about that.

We might liken our situation to water whirling towards the plughole in a sink – something most of us have watched from time to time. Far from the centre, the water is moving slowly, almost imperceptibly, perhaps taking a minute to complete a revolution. Halfway to the centre, it is moving four times as fast, taking 15 seconds per revolution. Halve that distance and it is moving four times as fast again, a revolution every four seconds. Halve that, and its whirling around once per second. The closer we get the faster it whirls, until it is sucked down the centre of the spiral.

Humanity is whirling faster and faster on its own spiral of change. And, just as the ever-more rapid whirling of the water comes to an end when it reaches the centre of its vortex, the hyper-acceleration in the pace of our development will come to its own end. But it will not end because we change our ways, or get innovation under control. It will come to an end as we spiral into the center of our temporal whirlpool – a time we inevitably started heading

toward as soon as the power of innovation was put in our own hands.

ACROSS THE UNIVERSE

The physicist Enrico Fermi pondered the apparent contradiction between a high probability of extraterrestrial civilizations existing elsewhere in our galaxy, and the lack of evidence for, or contact with, such civilizations. Why haven't they already colonized Earth? Or why don't we detect their radio transmissions?

Many answers have been proposed, ranging from the possibility that they are already here, to the possibility that the distances are so vast why would they bother. But the true answer may be that they don't exist. Or to be more precise, they exist only for a relatively short time.

Whatever their physical form, any intelligent tool-using species is likely to develop technologies that enhance their well-being. And the more they develop, the faster they will grow, resulting once again in exponential growth. Whatever form their technology might take; within a short time (evolutionarily speaking) they will be meeting the consequences of their own hyper-acceleration, moving ever faster towards the centre of their own evolutionary spiral.

Marvelous as they may be in their moment of glory, it may be that intelligent technologically-empowered species exist only for a brief flash in cosmic time.

On the other hand, there may well be advanced intelligences that have not taken the technological path. Here on Earth, whales and dolphins show signs of intelligence approaching that of humans, and at times of great caring that may surpass our own. However, having no hands, they have not developed tools and technology, so have not been subject to accelerating change.

Perhaps the evolution of intelligence has taken a similar, non-technological, course on other planets. More advanced intelligence may be living in a planet's oceans (whether they be oceans of water, methane, or some other liquid). There a creature's body is free from the constraints of gravity, and can grow much larger than on land, opening the possibility for much larger brains. It may be there, in the extra-terrestrial oceans that intelligence and awareness far surpassing our own has evolved.

A COSMIC BUD

However, even though a technological civilization such ours may exist but for a brief period, all is not lost. Far from it.

On some of the trillions of planets across the Universe life will have appeared, and on some of those evolved into a rich diversity of species. From time to time one of those species takes the step into language and tools. A bud of self-awareness has appeared. And it appears quite suddenly.

On our planet it was preceded by billions of years of slow cellular evolution. Then by hundreds of millions of years of vertebrate evolution; then by millions of years of mammalian evolution; and then, almost out of nowhere, our tool-using ancestors appeared. With the advent of speech, the bud grew rapidly, at an accelerating pace. Within a short time, cosmically speaking, it started to bloom, bursting into an exotic, multifaceted cultural inflorescence. Billions of self-aware petals, seeking to become all they can be; to know all there is to know.

When a planet bursts into bud, knowledge takes off on its own accelerating curve. We have learnt as much about the physical world in the last fifty years as we did in the previous five thousand. And we may learn as much again in the decades ahead. Physics is approaching a "theory of everything" – a set of mathematical equations that underlie all the forces of nature. We are not there yet, but many believe the breakthrough could happen any time. In cosmology we are beginning to understand how the Universe came into being, and where it might be headed. Again, we are not there yet – there remain many unanswered questions, and almost as many competing theories – but discoveries in this field are coming fast. Similarly with life itself, progress in molecular biology is proceeding at such a rate that we may come to a full understanding of life in coming years.

However, knowledge of the physical universe is but half of what there is to know. We are also conscious creatures, and as significant as all our scientific, technological, and cultural developments may be, of no less significance is our having become self-aware. We are not only aware of our experience, we are aware that we are aware. And no knowledge of the cosmos could ever be said to be complete if it did not include a full knowledge of awareness itself, without which nothing would be known. Today the interest in knowing consciousness itself is rapidly growing, both scientifically and on a personal level.

Our species may be gone in a century or so, but that does not mean it is all for nothing. Quite the opposite. We may have little future in terms of linear time, but in exponential time so much more is possible. In the coming decades there may be as much development as has happened in the whole of human history. Or perhaps even more. Within the short linear time remaining for our species we may yet come to a complete knowing of the world, both around us and within us. This does not mean knowing everything it is

possible to know, but everything this particular intelligence could know in this biological form, from this point in the universe.

Another bud of consciousness will have blossomed.

ACCEPTING THE INEVITABLE

We've always known human beings could not last forever, but most of us have imagined the eventual end to be some time way off in the future. We don't like to consider that our end may be just a few generations away.

There are obvious parallels here with our own death. We know it is coming, but unless we have some terminal illness or suffer a potentially mortal injury, we tend to push it away to some time in the future – not tomorrow. Yet accepting our own mortality is part of being a mature human being. Indeed, confronting death directly can produce profound shifts of consciousness. People may reconsider what is really important, value love more than wealth, seek to make amends for past misdeeds, and perhaps find a renewed purpose in life.

The same may apply to humanity. Previously, we were not forced to conclude that homo sapiens might be coming to an end a lot sooner than we anticipated. Accepting the mortality of our species could be a collective coming of age. It may be just what we need to guide us through the coming times.

PLANETARY GRIEF

Our attachment to the continuation of our species is quite natural. It is who we are. And quite appropriate that we should love who we are and want us to continue. But how do we include within that the growing realization that our end may be coming much sooner than expected?

This will come to a head as the reality of the unraveling hits home. There will undoubtedly be widespread despair, depression and distress. There will be pain, remorse and grief over what has become of us, this wondrous, creative, intelligent species, and of this beautiful planet with its awe-inspiring diversity of life. And there will be much fear and anguish about how our own lives will unfold as we head into the eye of the coming storm of change.

How will we each deal with such pain and grief? Will we go into denial, refusing to accept what is happening? Lose ourselves in panic and terror? Or find the acceptance that allows us to move into the unknown with courage and an open heart?

With the sudden death of a loved one, there are recognizable stages to grief. The first is denial. We cannot believe he or she has passed, and is no longer with us. It can't be true. Then comes anger. Whether directed towards God, a physician, an illness, a circumstance, or some other agency, How dare this happen? It is not what I wanted. Third may come bargaining. We want our loved one restored. If only I had just done this or that. Maybe even now I can make some deal to bring the person back. This is often followed by depression. We may withdraw from life, consumed by sadness, wondering if there is any point in going on alone? Finally comes acceptance. It is accepting the reality that our loved one is physically gone. We may not like this new reality, but we adjust and learn to live with it.

Humanity will undoubtedly enter its own collective grieving as the writing on the wall becomes more apparent.

Clearly we are already in denial, whether it be climate denial, denial of the poverty in which one third of us live, denial of the fragility of civilization.

Those who've woken up from denial may move into anger; anger at the corporations, the politicians, the wealthy, the church, the military, the terrorists, or anyone else we blame for the crisis we are in.

There are already signs of the bargaining phase. If we just changed our ways perhaps we could make things OK again, rescue ourselves from the tragedies that lie ahead. Perhaps it is not too late to clean up our act and save the world.

Then will surely come depression. What have we done? This is terrible. The future looks so bleak, There will deep sadness at what has befallen us.

Finally – hopefully – there will come acceptance. We let go of our attachment to how things should be, our hope that things will turn out well in the end, and accept this is now the way things are. We don't deny the painful emotions that may arise, but accept them as part of living through these times. We adjust to the new situation and perhaps find a deeper meaning to life.

SPECIES' EXTINCTION

It is becoming apparent that we are likely witnessing the start of a sixth major species extinction in Earth's history, one triggered this time not by a comet strike or volcanic eruptions, but by one of the planet's own species. It may be that a significant proportion of Earth's species again become extinct. Most, if not all, the larger animals (including us) would die out. But it is very unlikely to mean the end of life on Earth. Life itself is much more resilient. New species would evolve, and a million years from now the planet would flourish again.

It is also possible that it may not be so severe. Some people might survive, perhaps eking out an existence in the newly-green polar regions, or possibly in some contemporary arks – self-sufficient, sustainable, high-tech habitats created by the wealthy to ensure their survival in the final days. If they are lucky, they might even be able to survive long-term. Humanity would not have become extinct after all.

But we would still be an innovative species. We would still be seeking to improve our lot – which in such a future might not be a very happy lot. As before, we would find ways to survive better and more comfortably. And the positive feedback of innovation breeding innovation would still be operating. Slowly but surely, the spiral of acceleration would begin to wind itself up again, and slowly but surely we'd eventually approach a similar point in time. Once started, there is no way off the exponential curve.

Even if some indigenous people survived, the ultimate fate would be the same. It is true that indigenous peoples today generally live in harmony with their environment. But remember that we in the developed world are the descendants of indigenous peoples. Today's twenty-first century culture is simply what happens to an indigenous culture as technology takes hold. The Yamamani of the Brazilian rainforest are just ten thousand years behind us.

Extinction often conjures the notion of us all being wiped out in some global catastrophe. This is of course possible. But species generally become extinct as their habitat becomes increasingly inhospitable. Their numbers begin to decline, until eventually there are only a few left; then none. Similarly, as the great unraveling takes hold, and our world becomes less and less hospitable, our numbers will start going into decline. In T.S. Elliot's words, it will end "not with a bang but a whimper."

WHAT TO DO?

The question then naturally arises: How do we spend our final days? How do we as members of an intelligent, self-aware species, choose to spend our lives, knowing that our species will not be around much longer?

Do we party madly, consuming to the last drop of oil? Or bury our heads in depression and hopelessness?

For me, acceptance of the situation has brought with it some surprising shifts in attitude. I am not so angry at the people whose views and actions I disagree with. I am no longer such an avid follower of the news, getting upset by the latest political shenanigans, economic swings, or social unrest. This is simply how it is to be living through the final generations of an intelligent, technological species. There is no blame to be apportioned. Instead I can be more understanding, more forgiving.

Accepting the end is nigh does not mean that I no longer care for the world around me. I still want to do what I can to preserve the planet, but now I want to do so for the planet's own sake. Perhaps the best we can do with our remaining years is to make sure we leave the Earth in as good a state as possible for the species that remain and those that may follow.

We will also need to take care of our fellow beings who will be in need of help and support – providing basics such as food, water, shelter, medicine. And there will be much needed emotional and mental support – care, comfort, compassion, coping with the fear and pain, and adapting to changing situations.

Greater flexibility will be important, in our thinking as much as anything. We need to be able to let go of outdated thinking and habitual reactions; to see things with fresh eyes and respond appropriately. And we will need personal stability. We don't want to be thrown into fear and panic whenever we meet the unexpected.

Strong community will be valuable. The future is uncharted territory; we will feel vulnerable at times, and in need of emotional support. In community we can build the material, psychological, and social resiliency that will help us navigate the coming times.

EXITING WITH GRACE

We are wondrous beings, with unique gifts and abilities. We are capable of love and deep compassion, an appreciation of beauty, the creation of great art, music, and poetry. We are aware of our history, of how we came to be here. We have studied the world around us, and been awed by what we have discovered. We can imagine the future and choose how to respond. We find meaning in our lives, a sense of justice, and an inner wisdom.

There is much to celebrate about us. The question is: Can we celebrate all that we have become, while accepting that we are here only for a brief flash of cosmic time? A friend reminds me of the so-called century plant that flowers once in 20 or so years. When it does finally bloom, we marvel at the giant stalk, holding high a magnificent array of yellow-flowered branches. The spectacle is made all the more awesome by the knowing that it flowers but once; then dies, its purpose complete. Can we celebrate ourselves in a similar light? Another blossoming in the cosmos. An exquisitely beautiful flowering of consciousness. A miracle of creation.

Can we let go of the cherished belief that we are here to stay, rejoice in our existence, and live our final days with grace?

Despite knowing the journey, and where it leads, I embrace it and welcome every moment. ~ Louise Banks, *Arrival*.

DEEPAK CHOPRA

A CRITICAL ISSUE

WHAT TO DO WHEN DARKNESS RISES?

Deepak Chopra MD, FACP, founder of The Chopra Foundation and co-founder of The Chopra Center for Wellbeing, is a world-renowned pioneer in integrative medicine and personal transformation, and is Board Certified in Internal Medicine, Endocrinology and Metabolism. He is a Fellow of the American College of Physicians, Clinical Professor UCSD Medical School, researcher, Neurology and Psychiatry at Massachusetts General Hospital (MGH), and a member of the American Association of Clinical Endocrinologists. The World Post *and* The Huffington Post *global internet survey ranked Chopra #17 influential thinker in the world and #1 in Medicine. Chopra is the author of more than 85 books translated into over 43 languages, including numerous New York Times bestsellers. His latest books are* You Are the Universe *co-authored with Menas Kafatos, PhD, and* Quantum Healing: Exploring the Frontiers of Mind/Body Medicine *(revised and updated). discoveringyourcosmicself.com*

A CYNIC WOULD SAY THAT WE HAVE BEEN hearing about the emergence of higher consciousness for at least fifty years, and yet collective enlightenment isn't in sight yet. The reason for being discouraged is that with the evolution of consciousness, a straight-line path isn't feasible. The darkness rises to meet the light, to quote one of the truest spiritual adages. By darkness I don't mean to make a moral judgment. I'm not referring to evil, human weakness, the capacity for violence, or hidden dragons of the unconscious.

Instead, the evolution of consciousness works differently from any other project, if I may call it that. When we set out to accomplish something, what is our course of action? No matter whether it's building a house, reaching a peace accord between nations, or making dinner, the steps involved include the following: deciding what your goal is, setting up a plan to achieve the goal, assessing how long it will take, what materials you need, and making sure that you are ready and able to get to work.

Almost none of this applies to the evolution of consciousness. Examined from the viewpoint of the world's wisdom traditions, the path to higher consciousness is marked by some highly peculiar, even unique qualities:

- You can't see the goal in advance.
- You therefore cannot make reliable plans on how to achieve the goal.
- Because your inner life is constantly shifting, you never know if your attitude is correct or even if you are equipped for the next phase of the journey.
- Your ego-personality, which supports you in every other activity, is of little use when addressing consciousness as a phenomenon. Some even consider the ego-personality an obstacle or outright foe.
- Even though you think and act as an individual, consciousness isn't personal: it's universal, holistic, and in the end inconceivable.

All of these points can be discussed at length, but I don't think I've misrepresented them. Once you absorb that your own evolution must come to terms with everything on this list, the picture changes. You realize that you are like a surgeon performing surgery on himself, an impossible task. How can an individual guided by the ego-personality, with no set goal or reliable map in hand, ever evolve? The answer is that none of us actually evolves. Instead, we increasingly let our true unbounded nature come to light; we meet our true self, exchanging a series of provisional selves along the way for something closer to reality.

These provisional selves, from birth to death and conforming to every situation in between, feel like "I, me, and mine." We own them; we assume we *are* them. But from a nondual perspective, these selves are just garments to clothe the ego, a superficial covering that mask the true self. Because the true self is the only part of us that knows what is going on, it invisibly manages our evolution. Think about an infant looking forward to stages of development that are controlled invisibly from a level of life it has no knowledge of. Ahead lie baby teeth, adult teeth, puberty, the formation of the immune system, the maturation of the brain, etc. The controller of these processes, we say, is our DNA.

But in fact, the controller is the invisible knowledge encoded in DNA, not the chemical amalgam of a gene, which consists of very ordinary carbon, hydrogen, nitrogen, and oxygen for the most part.

If there is a similar controller of our conscious evolution, it too consists of knowledge, and just as DNA unfolds a child's development on schedule, with a definite timeline that puts baby teeth, for example, ahead of puberty, the evolution of consciousness unfolds according to a timeline. But because the whole self is involved, with the inclusion of every personal trait that makes us unique individuals, this silent unfoldment is dynamic, shifting, responsive to life situations, and impossible to predict in advance.

There is no "in advance." Evolution happens in the now, and it's an open question whether any of us is holding the reins or if, as some sages and masters contend, everything is controlled by universal consciousness, with each of us acting as its conduit. Leave that issue aside. Because the evolution of consciousness is about the entire self at every moment, there is an inconceivable project at work, one that is dismantling the whole setup of duality to arrive at nonduality – unity consciousness, the true self, Atman, whatever you want to call it.

To dismantle duality involves the dark side, by definition. The setup of duality consists of the dramatic confrontation of opposites. We may not like certain opposites because they lead to pain and suffering, violence and every form of non-love. But without both sides in dynamic balance, there is no relative world, and at the same time no evolution. Evolution depends on adapting to challenges in a new way. If nature somehow operated without creation and destruction — in a kind of steady state universe, I suppose — there would be no need to evolve. But in the creation that we know and which has shaped every quality of life, evolution is the opposite of entropy. Entropy is the force that insures destruction, and evolution takes the opportunity after each act of destruction to invent a new creation.

This is true when a thought disappears, leaves a blank space, and a new thought appears. It's true when a physical structure like a corpse or an ancient ruin decays. On the personal level, it's true when we dismantle some aspect of the ego-personality so that a more evolved aspect can take its place. The darkness is essential, and speaking personally, I trust that higher consciousness or the true self knows better than I do which parts of the darkness must come to the surface and when. In the Indian tradition the all-knowing creative force of Nature is Shakti. I will only mention the word, because there isn't enough space even to sketch in how Shakti works, only that it does.

The darkness, being essential, is not to be feared, shunned, or denied. Our strategy as evolving selves is to patiently confront every sign of darkness, accepting that the light will find a way to overcome it. There is no need to use the tools of darkness against it, either, since violence, resistance, despair, hatred, and fear are not how the light operates. The light is nothing but awareness revealing something new about itself, bringing the true self, which is universal, into the equation. To the extent that we are able, each of us must remember that the true self is the real self. Only by standing firm in who we really are can the evolution of consciousness take hold every day throughout our lifetime.

TOM ATLEE ~ ROSA ZUBIZARRETA

EMBODYING WHOLENESS IN OUR SOCIAL PROCESS

OUR EVOLUTIONARY CHALLENGE AS HUMANS

For 30 years Tom Atlee has sought to identify how humanity could use its emerging mega-crises to transform itself into a wise civilization resonant with the self-organizing dynamics of the natural world. He is founder of the nonprofit Co-Intelligence Institute <http://www.co-intelligence.org/> and author of four books, most recently Participatory Sustainability *(2017). He lives in a cooperative house in Eugene, Oregon, and can be contacted at <cii@igc.org>.*

Since 1980, Rosa Zubizarreta has been engaged in the practice of inter-human attention for facilitating human emergence. She is particularly interested in empathy-based epistemologies for shared meaning-making that tap the transformative power of divergent perspectives. With a background in emotional healing and training in organization development, she enjoys consulting, writing, teaching, and collaborating with others. You can reach her through <www.DiaPraxis.com>.

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With deep gratefulness to the Water Protectors at Standing Rock, and their courageous prayers on behalf of all life.

WHAT MIGHT "COLLECTIVE ENLIGHTENMENT" mean for us as a species? In many spiritual traditions, personal enlightenment has been understood as the individual realization of non-separation. This realization is then embodied in one's way of life: "after Enlightenment, the laundry" is a well-known Zen saying. However, while a simple ox-herder may return to a life of ox-herding with a new consciousness yet little change in external appearance, we would not expect a mass murderer such as Angulimala to return to their previous life "after enlightenment", but instead, to take up a transformed one[1].

Given that in our present state we are collectively destroying massive quantities of other life-forms, as well as arguably on the verge of self-destruction as a species[2], the possibility of collectively realizing our non-separation from one another and from the rest of Life seems beyond appealing – in fact, it appears completely necessary for our long-term survival[3]. This sense of necessity is depicted quite strongly in Barbara Marx Hubbard's metaphor for the transition that our species is currently experiencing, as a birthing process; while the labour pains are completely natural and to be expected, there is no possibility of "going back", only forward, and no guarantee of ultimate safety for either mother or child[4].

At the same time, it's also clear that any consciousness of non-separation, whether individual or collective, needs to be fully inclusive. On an individual level, many of us have been learning how "spiritual bypasses" which ignore our bodies, our emotions, and our shadow, are "near enemy" of the real deal[5]. Similarly, our "collective enlightenment" needs to extend far beyond our feelings of unity with those humans who are part of our same comfortable "bubble". Instead, we are being challenged to realize our sense of species-being as described a few centuries ago by Feuerbach, for whom Love was "the realization of the unity of the [human] race, through the medium of the moral disposition […] A loving heart is the heart of the species throbbing in the individual[6]."

We can find a more modern version of this sentiment in the anthem of the Rastafarians: "One Love… One Heart…" Yet the oneness of "unity" has long been misunderstood as "conformity", or worse, "sameness"; thus as we move toward greater wholeness, our ways of relating with difference become key, and the question of "Enlightenment […] what's *diversity* got to do with it?" becomes a central exploration[7]. Just as we value the simplicity on the far side of complexity, we want the unity that arises from a full appreciation of our diversity, rather than from sameness or conformity[8].

The young, idealistic Marx was inspired by Feuerbach, yet felt the need to attend to the material conditions that would allow us to realize our unity with one another more fully: it is hard to love your landlord when your children are starving. Similarly, we need to attend to "MA", the material plane, our living Earth that for too long in the Western world

has been devalued as dead matter devoid of Spirit; while at the same time, we need to find our way beyond domination, whether that of autocratic states or even more autocratic corporations. Thus, the approach to collective enlightenment that we are looking at here is *the capacity of humans to collectively perceive and respond to the complex ecological and social realities we are immersed in and participating in, and to consciously behave in ways that align with those realities and serve the sustainable vibrancy of humanity and the rest of nature.*

We have witnessed a multitude of efforts along these lines sprouting up all over the world for many decades now, in response to the felt evolutionary imperative of "evolve or perish" – and there are new ones coming up every day. Just as glimpses of the experience of personal enlightenment can serve to sustain, guide, and inspire us as we mature on our developmental journeys, glimpses that prefigure collective enlightenment can serve to nurture and inspire our next steps as we expand to meet our current collective evolutionary challenges. Thus much of the work that we have each engaged in over the years has been that of deeply appreciating[9] and learning from the abundance of initiatives along these lines.

Significant innovations in appropriate technologies, permaculture, new economics, and more, are all key to our collective response to complex ecological and social realities. At the same time, in our work we have each been focused on human systems for self-organization and self-governance that support the awakening of the consciousness of non-separation in groups, organizations, and social systems. One way to describe this field is the human cybernetics of collective self-regulation, including the process of consciously evolving our cultural norms[10]. In less technological language, we can speak about the "conscious evolution of increasingly conscious social systems[11]." We see this a key element of what is needed for collective enlightenment.

GROUNDWORK FOR THE WISE DEMOCRACY PATTERN LANGUAGE

In this next section, we'll be describing some highlights along the journey that led Tom to his most recent project, the Wise Democracy Pattern Language[12], which consists of an informed distillation of many of these evolutionary efforts. In some ways, the work of generating the first draft of a pattern language could be described as a form of "grounded theory", drawing out patterns from a series of instances[13]. The following experiences contributed to the living data or "texts" that inform this work.

THE GREAT PEACE MARCH

Tom's early experiences include being raised in a progressive activist family, engaging in Quaker silent-meeting spiritual practice as a teen, and identifying as a peace activist from a young age, which eventually led him to drop out of college to organize draft resistance to the Vietnam War. Yet it was his participation in the 400-person cross-country Great Peace March (GPM) in 1986 which triggered the most significant shift in his life, offering his first major experience of palpable collective intelligence[14], functional leaderless/leaderful self-organization[15], and the power of circle process[16] which marchers were taught by their fellow Native American marcher, Shanawa Littlebow. In all these dimensions of his GPM experience, conversation (from Latin "turning together") was perhaps the most fundamental feature and common denominator[17].

Six years later, Tom ran across a passage in Jerry Mander's *In the Absence of the Sacred* where Oren Lyons, Faithkeeper of the Turtle Clan of the Onandaga Iroquois, said of Native Councils, "We meet and we just keep talking until there's nothing left but the obvious truth[18]." Tom recognized in that statement the essence of what he'd experienced on the Great Peace March, and the quality of conversation he had been seeking to understand and research ever since. By the time he encountered this quote, Tom had already realized that an essential element, not explicitly stated by Lyons, was the evolutionary nature of this kind of conversation. It was not a matter of picking the best argument nor creating good compromises; instead, it was a "listening into the middle" – listening into the heart of the matter, the heart of the group, the heart of the world – to evoke and welcome the emergence of greater understanding, relationship and possibility as the listening-cantered dialogue progresses.

During the nine-month long nomadic community of the Great Peace March, the spirit and practice of circle process supported participants in hearing one another, promoting a culture of deep listening along with respect for diversity and its potential gifts. With this practice, the Great Peace March was able to function both as a community and as an organization, sharing and processing information, concerns, solutions, visions and innovations within the shared orientation of its larger mission of walking across the country to promote nuclear disarmament. Normally top-down organizing functions such as the massively complex logistical challenges of where to put up 400 people each night and how to feed everyone with very limited resources were handled successfully with decentralized volunteer labour both from within the March and from

the networks and communities that were inspired to support their remarkable activist effort that spoke to the hearts of thousands of supporters. The March evolved into a coherent collective entity whose diversity and conflicts were grist for the mill of its intense conversations, its existential necessities, and its visionary mission. Tom and his fellow marchers learned over time that peace can manifest powerfully as the ability of diverse people and groups to co-create their shared lifespaces together in deep, abundantly life-serving ways. The Great Peace March mobile community – the "Peace City" of hundreds of dome tents and dozens of support vehicles – provided the space within which that fundamental reality was played out in daily experimental practice and evolution.

THE ORGANIZATION DEVELOPMENT CONNECTION

Unbeknownst to Tom, three organizational development consultants – Eileen Palmer, Sam Kaner, and Duane Berger – visited the Great Peace March en route to study its dynamics. In addition to writing a professional article about their experiences and observations[19], Eileen Palmer went on to co-found an informal network of OD professionals, academics, and activists called the Center for Group Learning (CGL) in Oakland, CA.

Within a year after the Great Peace March, Tom synchronistically ended up in nearby Berkeley, where he became one of CGL's early members. In their monthly meetings, this small group explored a variety of group processes – Bohm Dialogue, the Tavistock Method, T-Groups, Listening Circles, the Enneagram, and more – and developed their own varieties and integrations of these approaches. With a few other CGL members and friends, Tom also participated in a weekly Dialogue Group inspired by the work of physicist David Bohm and spiritual leader Krishnamurti. Bohmian Dialogue is based on exploring one's own and each other's assumptions en route to deeper connection with one's individual immediate experience as well as the group's collective consciousness. Hosted by Jeff Groethe, an eclectic practitioner of Tibetan Buddhism who introduced diverse linguistic exercises for shifting group consciousness, including speaking in E-Prime[20], this small group experienced profound shifts and learnings over a period of two and a half years.

While participating in these ongoing activities during the 1990s, Tom also became exposed to large group practices such as the World Café, Appreciative Inquiry, and Open Space Technology[21]. He saw how all such processes could support the emergence of functional self-organization and group-level collective intelligence – the ability of groups to more effectively solve problems and learn together. Through his organizational development friends, he was introduced to Peter Senge's classic book *The Fifth Discipline: The Art and Practice of the Learning Organization* that mainstreamed the idea of collective intelligence for organizations. These were all eye-openers for Tom, but his activist worldview wanted more. Many people were applying these methods to community organizing and even occasionally to helping activist groups. Yet Tom wondered what these approaches might have to offer at higher levels of social organization. How could the methods that helped diverse people work out their differences in groups, organizations and communities be used to help diverse people, partisan groups, and interests break through to transformational solutions for their whole society?

TRANSFORMATIONAL APPROACHES TO COMMUNITY AND SOCIETAL CONFLICT

In the early 1990's, the work of the Public Conversation Project[22] started to gain national attention when they began to bring pro-life and pro-choice activists together in dialogue[23]. As a result of this work, some activists with differing views were finding areas of common ground. For both Tom and Rosa, this was a significant initial exposure to the power of approaches that explored a polarized public issue with transformation in mind.

Two particular dynamics stood out from this work: an initial sharing of personal life stories that led each participant to feel so strongly about their own views on the issue, followed by creating room for exploring the complex thoughts and feelings that are usually squeezed into vastly oversimplified and polarized positions, as required by our majoritarian system in order to gain political impact. When participants instead voiced their actual personal opinions, what emerged was more like a spectrum or ecosystem of nuanced views and emotions than the militant slogans we find in the media and street demonstrations.

In the mid-1990's, Tom encountered Future Search[24], an approach where dozens of diverse stakeholders are invited to review their past history together prior to examining the larger forces that will shape whatever happens to them and their shared situation in the future. They then explore scenarios for future visions they might work towards together, and break up into action groups to begin working toward different parts of their vision.

A third significant approach in this area is Arnold Mindell's Process Worldwork, designed to address conflicted social "fields". Mindell, trained first as a physicist and then as a Jungian psychoanalyst, combined those

two worldviews into an exploration of energized narrative fields within the collective unconscious. These fields profoundly shape our thoughts, feelings, and behaviours, and can fuel oppressive social phenomena such racism. From the common term Zeitgeist (German for "spirit of the times"), Mindell coined the term "timespirits" to describe the voices and energies that inhabit our social fields.

Early in 1992, Tom attended a three-day Process Worldwork workshop on racism in Oakland involving 200 participants of different races. Mindell and his facilitators encouraged participants to give voice to these timespirits so they could hear one another and evolve. This generated an intense series of highly unusual and revelatory experiences for participants. Intriguingly, while Oakland felt like a racial tinderbox before the workshop, it turned out to be far more peaceful than other cities during the "Rodney King riots" that ignited a few days afterwards[25].

And then in 1997, as Tom was explaining his work to Diana Brooks, a new friend, she reached into a recycling stack of old magazines and pulled out one from July 1991 with the cover story "The People's Verdict". *Maclean's* – Canada's leading glossy newsweekly – had scientifically selected a dozen ordinary Canadians specifically for their differences so that they represented a cross-section of the seriously divided country. *Maclean's* convened these folks for a long weekend with a team from the Harvard Negotiation Project to come up with a shared vision for their conflicted country, and then chronicled the dramatic details of this process and its unexpected success in forty pages of a special issue, along with an hour-long Canadian TV public affairs documentary.

Tom found this media event so unprecedented that he hired an investigative reporter to learn more about how it had come about, and what had happened next. He then wove both the original material and the reporter's four interviews with leading players into a special page on his website along with commentary about what he had learned from this innovation[26]. He was struck by how *Maclean's* had engaged readers by first providing bios of the participants and then painting a blow-by-blow account of their intense interactions so that the whole country was able to participate vicariously in this radically innovative social encounter. This made such an impression on him, that Tom featured the *Maclean's* experiment in both of his subsequent books on transforming democracy[27].

CO-INTELLIGENCE IN ACTION: WHAT COULD DEMOCRACY LOOK LIKE?

During this decade, Tom's central inquiry was "what would intelligence look like, if one took wholeness, interconnectedness, and co-creativity seriously? And how would we redesign democracy, on that basis?" One of several aspects Tom began to explore was *collective* intelligence, as mentioned earlier in regard to Senge's work. Tom's work with George Por, Robert Steele, and others in the Collective Intelligence Convergence Project[28] eventually contributed to a book on this subject[29]. On another note, the work of Howard Gardner on multiple intelligences[30] and Daniel Goleman on emotional intelligence[31] validated and expanded Tom's sense that intelligence was far more than mere rationality, and gave rise to his framing of *multi-modal* intelligence. Encountering permaculture, he realized it shared a similar kind of *collaborative* intelligence to what we see in improvisational jazz ensembles and the moves of Aikido masters.

And yet these various forms of greater intelligence could still be applied to narrow ends, so Tom began to see *wisdom* as another key aspect of *co-intelligence*, the six-dimensional model of holistic intelligence (multi-modal, collaborative, collective, resonant, universal, and wisdom) that became the central theme of his work for over a decade[32]. By examining the functioning of our whole society through the lens of these various facets of co-intelligence, a clearer sense of the need for a "wise democracy" began to arise, along with a stronger sense of the particular contributions of diverse innovations.

Tom's theoretical models and frameworks have evolved out of, and have also continued to inform, his ongoing practice of collecting and curating examples of societal innovations. Much of this work is still only available through his massive website, yet some small portion of those stories and examples were included in Tom's first book, *The Tao of Democracy*[33]. Even after three subsequent books, Tom's printed work is only a tiny tip of the iceberg of material that eventually gave rise to the Wise Democracy framework and to the distilled patterns that compose the Wise Democracy Pattern Language (WDPL). However, before we arrive there, a few additional streams also bear specific mention.

TURN-OF-THE-CENTURY LEARNINGS

In 1998 Tom was introduced to the disruptive potential of the Y2K computer bug. After encountering some in-depth writing about this issue[34], he came to view this technological glitch as a profound evolutionary challenge. In connection with the theme of this issue, it may be worth noting that traditionally, the contemplation of death has been part of the path toward individual enlightenment; in an analogous manner, Tom saw the potential social catastrophe

of Y2K as an opportunity for our technologically advanced civilization to come face-to-face with a version of collective ego-death. As part of his work during this time period, Tom created a website focused on the prospect of potential Y2K disruptions as an opportunity for personal and societal transformation[35]. This became the primary resource for the book *Awakening: The Upside of Y2K*[36], co-edited by two new Y2K colleagues.

At the end of 1999, during the World Trade Organization's Ministerial Conference and associated protests in Seattle, Tom attended a week-long class in Jim Rough's Dynamic Facilitation (DF) in nearby Port Townsend. The power of this methodology to generate breakthroughs from among diverse ordinary people or conflicted stakeholders so struck Tom – who wished to make it available to activists like the Seattle protesters – that he organized a half-dozen young colleagues to attend the next upcoming seminar with him in March 2000. Among those attending were Rosa – whose professional life was transformed by it[37] – and Elliot Shuford, who later went on to co-launch Oregon's Citizen Initiative Review[38], an oft-cited democratic innovation, with organizer Tyrone Reitman.

Dynamic Facilitation has remained an ongoing interest for both of us[39]. Subsequent small-scale grassroots experiments with Dynamic Facilitation and Jim Rough's Wisdom Council model in Oregon[40] and in North Carolina[41] have been heartening in the short-term, yet lacking any funding or institutional support, lost momentum fairly quickly. However, the government-sponsored participatory public policy effort in Austria that has been successfully utilizing this methodology for the last ten years[42], has been a particularly inspiring example of practical innovation toward a wiser democracy.

Inspired by Tom, Rosa also participated intensively in turn-of-the-century Y2K community-preparedness work, albeit at a more local level[43]. After collaborating with Tom on the publication of the *Tao of Democracy*, Rosa was commissioned by the Collective Wisdom Initiative to write "Deepening Democracy"[44], a seed essay placing that book within the broader context of the evolution of consciousness in the participatory democracy movement. Then in 2002, both of us attended the inaugural conference for the National Coalition of Dialogue and Deliberation (NCDD), a gathering place for facilitators, activists, organizers, consultants, funders and scholars interested in the power of conversation to help groups, communities, organizations and whole societies to resolve conflict, function well, and transform. For the last fifteen years, we have stayed connected with the growing dialogue and deliberation movement in the United States through participating in NCDD's conferences and listservs[45].

THE EVOLUTIONARY SALONS AND THE STORY FIELD CONFERENCE

During his Y2K work, Tom had met environmental activist Michael Dowd, a former fundamentalist Christian preacher who had converted to the science-based sacred story of evolution. Michael asked Tom and colleague Peggy Holman[46] to help organize a weeklong Open Space "evolutionary salon" with twelve evolutionary scientists, twelve evolutionary theologians and twelve evolutionary activists. This 2005 gathering at a former military base in Southern California immersed Tom in the profound power of evolution seen as a sacred story. After the conference Tom had an "evolutionary epiphany" watching a video showing Michael's science-writer wife Connie Barlow describing the cosmic sources of hydrogen and oxygen, the primary components of our bodies. He began a correspondence with Michael and Connie about evolutionary activism that continues to this day and which generated Tom's book *Reflections on Evolutionary Activism: Essays, Poems and Prayers from an Emerging Field of Sacred Social Change*[47]. His book describes activism as evolution becoming conscious of itself, and articulates the power available when we choose to learn from the 14 billion year dynamics of the Creative Power of the Universe.

From that first 2005 gathering came three subsequent Open Space evolutionary salons[48] including one on transformational philanthropy, which led to a research project by Peggy and Tom on how evolutionary dynamics can be used to transform social systems[49]. Another outgrowth was the 2007 Story Field Conference[50], also hosted using Open Space Technology, which brought together a wide variety of storytellers[51] to explore how to consciously impact the culture's collective "story field"[52] – a potent narrative field that shapes what we who are embedded in it think, feel, and do.

Tom has been exploring the power of story since 1993, and continues to see narrative forms as fundamental to human cognition, connection and motivation, and thus of collective intelligence and wisdom – in sum, a profound resource for the awakening and transformation of consciousness, relatedness, and social systems. He is particularly interested in what he calls "imagineering"[53], narratives that readers or viewers can use as sources of inspiration and information to live into the story in their actual lives. Another potent narrative form with significant social implications is real-life multiple-viewpoint drama[54], most notably the remarkable one-woman dramas created by Anna Deavere Smith,

who with masterful empathy draws viewers into the experience of diverse real-life participants in the 1991 Crown Heights riots and the 1992 Los Angeles riots.

DEVELOPING THE WISE DEMOCRACY PATTERN LANGUAGE

Tom first learned about pattern languages in the 1990's, as Christopher Alexander's set of interrelated patterns that provide guidance for life-serving architectural and community design[55] were becoming an increasing source of inspiration to many. Tom saw pattern languages as a fascinating, holistic way to comprehend and guide the design of healthy, vibrant realities of all kinds. So he'd often thought of creating a pattern language that drew on the output of his ongoing creative inquiry, as he studied, documented, and curated an ever-growing number of social innovations. Yet despite making many notes, he had not yet taken on the prodigious task of distilling all of this material.

In 2008, Tom and Peggy Holman presented the idea of creating a pattern language for group process at an NCDD pre-conference workshop[56]. That workshop was attended virtually by Tree Bressen, who in December convened a dozen facilitators at her house in Eugene, Oregon to actually launch such a project[57]. Over the next three years, Tree and a core team of colleagues held numerous meetings and consulted with more than fifty facilitators along the way; this intensive work culminated in the GroupWorksDeck pattern language cards, a tool for "bringing life to meetings and other gatherings[58]."

In June of 2016, Martin Rausch, a Swiss colleague who is both a group facilitator and a video producer, asked Tom if he'd like help in creating a pattern language. The various insights and approaches that Tom had been exploring for decades began to crystallize, and by the next morning, he had written down dozens of patterns that he saw as key for helping people design wiser democracies. Thus began an intensive nine-month collaboration with Martin via email and videoconference.

Inspired by the Groupworks pattern language format, Tom wrote 50-word introductions for each pattern. Martin then drew out Tom's thinking, by inviting him to speak about why he had described each pattern in that particular way. Martin's video-recordings of Tom's responses became the 5-to-15 minute video descriptions now posted on each pattern's page on the Wise Democracy Pattern Language website[59], along with edited transcripts offered as essays to deepen readers' understanding. Martin also asked Tom to list methods, examples and resources associated with each pattern and to describe images that might illustrate their essence. Martin then led the effort to locate actual images, working back-and-forth with Tom to ensure a good visual match for each of the system's seventy patterns. As they progressed, Martin fashioned a remarkably beautiful website to hold all this information, and more[60].

Thus, the Wise Democracy Pattern Language emerged from Tom's thirty years of study of hundreds of existing methods, prototypes, and case studies of democratic innovations, along with Martin's powerful work of "hearing into Being"[61]. The website and associated card deck are now freely available, with the intention of contributing to the larger purpose of the "conscious evolution of increasingly conscious social systems" by offering a social DNA of useful design patterns. Its current form is only an initial seed crystal; the intention is that it will be worked and reworked as we receive input and feedback from others, and as we encounter new environments, new challenges, and new needs and aspirations.

KEY ELEMENTS

The initial purpose was conceived as supporting all of us who are concerned about the state of democracy, to "envision and work together for a deeply participatory culture capable of dependably generating collective activity that serves the long-term quality of all life[62]." This includes 1) democracy visionaries, activists, authors, and reformers; 2) democratically inclined change agents of all kinds; 3) public officials and ordinary citizens frustrated with existing politics, government, and quasi-participatory regimes; 4) political science scholars, students, educators, and researchers; 5) communities and networks struggling with shared challenges and/or a desire for more public participation; 6) Dialogue, deliberation and public participation practitioners and academics who may find in these ideas and patterns new and useful perspectives on their work[63].

The project's working definition of democracy is 'collective self-governance', described as "any system of collective decision-making and action grounded in the power of those impacted by such decisions and actions, or in the power of the whole population generally. […] our elected representative government – technically a "republic" – is only one form of democracy, alongside direct, deliberative, participatory, anticipatory, and other approaches[64]."

In turn, wisdom is defined pragmatically as: "[…] deep insight serving our ability to generate long-term broad benefits." Wisdom is seen as arising from "cumulative experience, well-considered knowledge, compassionate understanding and/or transcendent

realization", and manifesting in various dimensions, including "individual and/or collective, human and/or natural[65]".

Nine sets of inquiries guided the overall development of the patterns. Here are four[66]:

- Does it point us toward "the quality that has no name"? Does it describe a feature that shows up repeatedly in democratic systems that exhibit exceptional vitality, health, spirit, sustainability and quality of life?

- Does it happen across methods/approaches? Is it a common piece underlying multiple methodologies?

- Is it fractal? That is, does it – or would it – show up at more than one scale (such as in an organization, a community, and/or a whole society)?

- Does it describe an action that can be consciously undertaken by people trying to nurture public wisdom and a wiser democracy?

The current set of seventy patterns are distributed among the following categories, which were created after the patterns were already established: "intelligence factors" (11); "general sustainability factors" (6); "wise democratic institutional principles" (7); "culture – collaboration" (10); "general wisdom-generating dynamics and qualities" (8); "power factors" (6); "culture – general" (7); "group dynamics and practices (that can also manifest in cultures)" (11); "individual capacities (that can also manifest in groups / societies)"(4)[67].

SCOPE AND LIMITATIONS

No municipal, state, or national democracies exist today that would fully fit our definition of "wise democracy". This could be seen as a significant limitation, since we are studying something of which we lack any fully developed examples. At the same time, many self-governance practices exist which manifest the various patterns that, in combination, could create far wiser democratic systems. These various practices include all of those described in the earlier section of this paper, and more.

As such, the scope of this project is broader than just formal governments. Instead, the project "covers those activities through which people shape their collective affairs and address their shared problems and aspirations. It includes (but is not limited to) making decisions, addressing conflicts, allocating resources, and influencing the behaviours of individuals and groups. Our concern naturally focuses on politics and governance but also embraces much of economics, for these are the prime determinants of mass behaviour." At the same time, "these realms not only influence each other but are also influenced by other aspects of society. And so, given our focus on wisdom, we are also concerned with culture, with knowledge systems (including science, journalism, education and all the dimensions of "the information age" and global connectivity), as well as with any other dynamics of human interaction which shape collective outcomes[68]."

That being said, a second major limitation of the project is our lack of background in e-government. While a good number of these patterns may still be relevant in that context, there may be many others yet to be discovered by those whose work is focused on that realm.

A third significant limitation is that this pattern language is being written from North American and European experiences and perspectives. While we believe that many of the patterns we describe show up cross-culturally, we do not claim universality for this pattern language. And so, while the work has been inspired by indigenous traditions and other wisdom traditions, it will not necessarily be applicable to all people, places, and cultures. The assumption is that users of this pattern language will take what inspires and supports them, and adapt the work appropriately as needed[69]. In fact, we envision the development of a community of practice around this pattern language, where participants can share their learnings and explorations as they work with this holistic tool for social transformation, and thus continually co-evolve it to better serve its purpose.

"USING DIVERSITY AND DISTURBANCE CREATIVELY"

Part of what makes a collection of design principles a pattern *language* is that relationships between patterns are identified and articulated. Pattern language users need to consider: "If I were to work on applying this pattern, which other patterns would I need to pay attention to?" In the Wise Democracy Pattern Language, Tom identified seven other related patterns for each pattern in the deck[70]. After working out the related patterns on a 70x70 grid, Tom decided to take the further step of looking to see which patterns had been chosen most often as related to other patterns in the set.

The two that showed up almost twice as often as the next most referenced patterns were "Using Diversity and Disturbance Creatively" and "Well-Utilized Life Energy". Upon reflection, Tom realized that these two patterns are actually two facets of the same dynamic. Life energy – as manifested in drives, passions, visions, needs, interests, values, purposes, concerns, etc. – is a powerful resource. In fact, it is often a very potent and freely available resource, if

we learn to recognize it, evoke it, and use it well. Yet at the same time, life energy can become entangled and shut down when different life energies collide with one another, creating disturbances. So if we want to use life energy well – and benefit from its abundant natural gifts and flows – we need to learn how to use diversity and disturbance creatively. Thus, as part of this distillation process, we have seen how the underlying pattern of "engaging with difference and disturbance creatively" emerges as a key pattern for the next stage in our evolution.

This is not a new concept in our work. Tom was a thinking partner with Peggy Holman for her book on *Engaging Emergence*[71], where "turning upheaval into opportunity" is a key theme. In a political theory article on integral politics[72], Tom explored the generative tension between coherence and inclusion as one of the key dynamics of wholeness, along with the value of working creatively with dissonance. And in a previous issue of this *Journal*, Rosa described a decade-long experiment in Austria, including over 35 instances of smaller, randomly-chosen microcosms of larger wholes, including municipalities, regions, and states. In nearly all of those instances, working creatively with divergent perspectives within these microcosms led to outcomes that generated resonance within the larger systems[73].

So clearly, working creatively with divergent perspectives has been a key theme in our work. At the same time, the process for identifying the patterns for the pattern language was a very open-ended one; and so to re-encounter this inherent convergence deep within its structure has been a reaffirming phenomenon for both of us, a "simplicity that has re-emerged on the other side of complexity[74]."

The significance of this theme also makes sense from an evolutionary perspective. The presence of diversity and disturbance often indicate an emerging dynamic, possibility or factor that we need to take into account in order to comprehend the larger picture. Being able to engage creatively with disturbing energies and information thus enhances our ability to generate big-picture wisdom. There is a collective enlightenment that can happen, *because* we are different, whenever we are able to use those differences to expand our perspectives. Or, as Mannheim wrote almost a century ago, "only when we are thoroughly aware of the limited scope of every point of view are we on the road to the sought-for comprehension of the whole[75]." Thus there is great wisdom in seeking to work skilfully with any available energies that are present, in order to serve the welfare of all beings over the long term.

IMPLICATIONS FOR COLLECTIVE ENLIGHTENMENT

We are aware of being part of a much larger movement of people who are working along somewhat similar lines. Within the more secular realm, the organization development world has seen the emergence of dialogic OD[76] and the management field is abuzz with interest in Teal organizations[77]. In the civic innovation space, just to mention one interesting parallel of note, we see that Schuler writes about civic intelligence[78], and he and his colleagues have developed Liberating Voices[79], a pattern language for "communication revolution". Within the more spiritual realm, in addition to the work of the Collective Wisdom Initiative, mentioned earlier, there has been a recent boom of experiments with "We-Space" within the Integral communities[80]. In addition to their structural elements, many of these could be regarded as experiments in developing an embodied *felt sense*[81] of interrelationship and non-separation within communities that contain diverse perspectives – and which need to develop wise approaches to self-governance. Thus, these various streams could be regarded as explorations in developing enlightenment on a collective level, as distinct from an individual level.

In a related vein, we have been inspired to see other pattern languages serving as a way to support practitioners of different methodologies to learn about and understand one another's work. Within the National Dialogue and Deliberation community, Cynthia Kurtz developed a way to use the GroupWorks pattern language deck to involve practitioners from different group facilitation modalities in fruitful conversation with one another, about the essential features of their respective practices[82]. Similarly, we would love to see the Wise Democracy pattern language lead to fruitful learning exchanges among peers working within the larger shared vision of developing wiser and more participatory approaches to self-governance.

In closing, we sincerely wish that the Wise Democracy pattern language may serve as a way to support interconnection among the various initiatives working toward creating a life-affirming culture. That in itself could serve as a small yet meaningful step toward our larger collective enlightenment – the realization and embodiment of wholeness and inter-being on the part of groups, organizations, communities, networks, societies and our entire planetary civilization.

♦

[1] Hecker 2007, *Angulimala.*

[2] Scranton 2013, *Learning to Die in the Anthropocene.*

[3] Atlee 2017, *Participatory Sustainability.*

[4] Moon Magazine interview 2017.

[5] Fosella 2011, *Human Nature, Buddha Nature.*

[6] Feuerbach 1957, *The Essence of Christianity*: 268-269.

[7] From a conversation with Lewis Woods in 1998.

[8] See e.g. Briskin et al 2009, *The Power of Collective Wisdom.*

[9] Smith 2009, *The Creative Power.*

[10] Vickers 1968, *Value Systems and Social Process.*

[11] This latter formulation was the outcome of the Evolutionary Salon co-convened by Michael Dowd, Peggy Holman, and Tom Atlee in 2005; see Atlee 2005, "Growing Together at the Emergent Edge of Evolution".

[12] <http://wd-pl.com>.

[13] Denef et al 2011, "Designing for Social Configurations"; for another example of generating a pattern language as part of one's research methodology, see Clarke 2016, *The Synergies of Difference.*

[14] Atlee n.d., "It all began in a fertilizer factory".

[15] Brigham 1999, "A Laboratory in Democracy".

[16] For an entertaining story about this, see Mercer n.d., "Circles and Dress Codes"; for a description of circle process as it was used in the Great Peace March, see Atlee n.d., "Listening Circles".

[17] Atlee 2015, "Conversation in the Conscious Evolution of Social Systems"; Hurley & Brown 2009, "Conversational Leadership".

[18] Mander 1991, *In the Absence of the Sacred*: 243.

[19] Kaner et al 1987, "What can organizational development professionals learn from grassroots peace activists?".

[20] A variation of English using no "to be" verbs; see <https://en.wikipedia.org/wiki/E-Prime>.

[21] The two authors first met when Rosa invited friends to attend an Open Space Technology event, the Organization Transformation conference in Napa in 1994. A mutual friend, Jane Deer, suggested to Tom that he might be interested in attending.

[22] The groundbreaking work of the Public Conversations Project continues; their organization has recently been renamed "Essential Partners".

[23] Roth 1994, "Constructive Conversation in the Abortion Debate".

[24] Weisbord & Janoff 2010, *Future Search.*

[25] Mindell 1995, *Sitting in the Fire*: 160-164.

[26] Atlee n.d., "Canadian Adversaries Take a Break to Dream".

[27] Atlee 2003, *The Tao of Democracy*; and Atlee 2012, *Empowering Public Wisdom* .

[28] Atlee n.d., "The Collective Intelligence Convergence".

[29] Tovey 2008, *Collective Intelligence.*

[30] Gardner 1993, *Frames of Mind.*

31 Goleman 1995, *Emotional Intelligence.*

[32] Atlee n.d., "Six basic manifestations of co-intelligence".

[33] Atlee 2003, *The Tao of Democracy.*

[34] Petersen et al 1998, "The Year 2000".

[35] <http://co-intelligence.org/Y2K.html>.

[36] Laddon et al 1998, *Awakening.*

[37] Zubizarreta 2013, "Co-creative Dialogue for Meeting Practical Challenges".

[38] While the Citizen's Initiative Review does not use Dynamic Facilitation, Elliot's belief in the power of diverse citizens to talk together to achieve significant outcomes was strongly nourished by this experience.

[39] Zubizarreta 2014, *From Conflict to Creative Collaboration*; Atlee n.d., "Dynamic Facilitation".

[40] https://tinyurl.com/DF-rogue.

[41] https://tinyurl.com/Ash-NC-DF.

[42] Zubizarreta 2015, "Participatory Public Policy Microcosms".

[43] Zubizarreta & Atlee 1999, "Grassroots organizations".

[44] Zubizarreta 2003, "Deepening Democracy".

[45] In 2009, Tom led an NCDD effort to produce guidelines for public engagement for the incoming Obama administration, the results of which were broadly agreed to by dozens of public engagement organizations; see http://ncdd.org/rc/item/3643. Subsequently, he has continued to serve in somewhat of a gadfly role, catalyzing a number of efforts to encourage NCDD members to tackle major emerging crises such as climate change.

[46] Holman 2007, *The Change Handbook.*

[47] Atlee 2009, *Reflections on Evolutionary Activism.*

[48] <http://www.thegreatstory.org/ev-salon.html>.

[49] Holman & Atlee 2008, "Evolutionary Dynamics and Social Systems".

[50] <http://storyfieldconference.net>.

[51] Atlee 2007, "What is a Storyteller" .

[52] Atlee 1995, "Storyfields" .

[53] Atlee 2007, "Imagineering".

[54] Atlee n.d., "Real-life Multiple Viewpoint Drama".

[55] Alexander 1977, *A Pattern Language.*

[56] In 2008, the biannual NCDD conference was held in Austin, Texas.

[57] Tom was one of the participants in this initial meeting, and in several subsequent ones. Notes from that initial gathering are available online at <https://tinyurl.com/GWPL-notes>. One interesting element in the notes is the explicit acknowledgement of the spiritual dimension of working with groups, as well as the choice of having that aspect remain implicit in the GroupWorks Pattern Language cards themselves.

[58] <https://groupworksdeck.org>.

[59] <http://wd-pl.com>.

[60] The website also includes theoretical essays describing a model developed by Tom in mid-2016 for an online pilot course. The model depicts how the three dimensions of Wise Democracy — power, participation, and wisdom — can be reframed and enhanced to create a wiser democracy.

[61] Morton 1985, *The Journey is Home.*

[62] From e-mail correspondence between Tom Atlee, Martin Rausch, and the CII Board and Associates .

[63] From <http://www.wd-pl.com>, "Who is this for?" section.

[64] http://www.wd-pl.com/definitions-2/.

[65] *Ibid.*

[66] For the full set, see http://www.wd-pl.com/6849-2/.

[67] http://www.wd-pl.com/patterns-by-category/.

[68] From e-mail correspondence between Tom Atlee, Martin Rausch, and the CII Board and Associates.

[69] From <http://www.wd-pl.com>, "Who is this for?" section.

[70] The size of this constraint was based on the convenience factor of how many related patterns could be reasonably placed on each card.

[71] Holman 2010, *Engaging Emergence.*

[72] Atlee 2010, "Integral Politics as Process".

[73] Zubizarreta 2015, "Participatory Public Policy Microcosms".

[74] From a quote attributed to Oliver Wendell Holmes, Sr.

[75] Mannheim 1936/1985, *Ideology and Utopia*: 105; current work in social psychology confirms this (Haidt 2012, *The Righteous Mind*) .

[76] Bushe & Marshak 2015, *Dialogic Organization Development*; see also <http://www.dialogicod.net>.

[77] Laloux 2004, *Reinventing Organizations*; see also https://tinyurl.com/Teal-wiki.

[78] Schuler 2015, "How we May Think: The Next Chapter".

[79] Schuler 2008, "Liberating Voices".

[80] Gunnlaugson & Brabant 2016, *Cohering the Integral We Space.*

[81] Term originally coined by the eminent philosopher and psychologist Eugene Gendlin, who has recently passed away.

[82] Kurtz 2017, "Conference report, part four".

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He who knows others is wise; he who knows himself is enlightened.

Lao Tzu

Enlightenment is the natural state of consciousness
untouched by the movement of thought
and freed by the control of the emotions.

Adyashanti

Man has no body distinct from his soul;
for that called body is a portion of soul discerned by the five senses,
the chief inlets of soul in this age.

William Blake

⊙ ♦ ⊙

TERRI O'FALLON

THE INTEGRATION OF AWARENESS WITH THE INDIVIDUAL AND THE COLLECTIVE.

AN INQUIRY

Terri O'Fallon is a researcher, teacher, coach, spiritual director and designer of transformative containers. She does ongoing research on the Integral STAGES developmental model which supports a MetAware tier with two later levels of development.

Terri is a partner of Developmental Life Design, which creates programs based on the STAGES model. She also is a partner in Pacific Integral, which creates transformational programs in later level Leadership. Terri holds Masters degrees in Special Education, in Spiritual direction and an Integral PhD in Transformative Learning and Change.

♦

THE COLLECTIVE HAS BEEN A FORMIDABLE FORCE on individuals from the beginning of time. However, in our own identities we tend to rock back and forth between identifying with our individual selves as primary and the collective as primary – the collectives that we sometimes experience as shaping us. When a tipping point of any collection of individuals foregrounds the individual, one kind of collective will show up. When a tipping point to any collection of individuals foregrounds the collective, another kind of collective shows up. Both individuals and collectives have a vertical developmental growth trajectory based on their capacity to see and embrace different worldviews, or perspectives.

In addition, the understanding of the maturing of Awareness as an individual experience or as a collective experience will also shape the individual and the collective. Mature awareness provides a horizontal limitless "ocean" within which both the individual and collectives arise, bringing wisdom to the growing up of our communities, which shape us as individuals even as we shape them.

TWO TYPES OF COLLECTIVES: THE RELATIVE AND THE ULTIMATE?

Defining the word "collective" may seem like an easy task; after all, we commonly think that this is simply a group of people. However, as our worldview matures, so does our definition of a collective. Perhaps there is more to this than we might think.

When we look at collectives from a developmental point of view we see that collectives grow up in a relative sense just as individuals do[1]. The kind of collective that we are engaged with as a child at a second person perspective ("I see you see me")[2], is very different from the kind of collective that one experiences at the much later sixth person perspective[3]. While this growth process may seem ultimate in some ways, the person perspectives are really our own relative ways of seeing and experiencing ourselves and the kinds of collectives we are involved in.

There is another kind of collective we might point to. This collective is what might be called an "ultimate" collective, or the kind of collective that is realized out of the development of the stages of awareness called "vantage points"[4].

When we combine these two visions of collective life, our understanding of an enlightened collective takes on a new meaning.

RELATIVE COLLECTIVES

Our worldview, otherwise understood as our person perspective, is the lens we look through to make meaning of the world. At times, we look from an individual person perspective, where we do what we can to shape a collective. Other times we view from a collective perspective and the individual is shaped by the collective[5].

As we mature through the progressive worldviews, (person perspectives) we rock back and forth between an emphasis on the individual and an emphasis on the collective. The first person perspectives, the third person perspectives, and the fifth person perspectives tend to look through individual lens where the person thinks first about their own individual preferences. When we emphasize the collective lens we generally foreground the second person perspective, the fourth person perspective and the sixth person perspectives.

Alternating preferences between the individual and the collective worldviews supports individual and collective maturity as one grows the other up each

in their own turn. For example a first person perspective is first represented by a toddler who Is learning to express their own agency. They want and take; everything is "mine" to that child as they joyously express themselves even as they intrude on others boundaries, unknowingly and spontaneously. While they may be delightful to encounter, at some point the community around them begins to defend their own boundaries and this vivacious child soon learns that they cannot get and do whatever they want. They run head-long into the collective shaping of their unbounded first-person individuality. There is a gift in this because as they begin to understand the collective nature of their shaping they also experience the joy of friendship which is provided by their community and having a friend becomes more important to them then getting what they want. They conform to the group as they discover the joys of belonging.

However collective life can be constraining as well, and at some point, tiring of rules, roles and conformity, they again express their next individual identity that arises at the Subtle Tier; their identity is interior and subtler than being identified with their physical body. They learn to get the subtle things that they want through goal orientation, planning and persistence. This subtle identity is eventually altered by a new collective that reshapes them again, but this time the collective is a complex adaptive system expressed in multiple contexts that hold the individual. This fourth person collective worldview has sprouted wings and the individual foregrounds and engages within postmodern collectives.

The MetAware Tier arises when the rocking chair moves into yet another individual worldview. A new identity, that of awareness, comes on line, and individuals develop motivations beyond the typical goal oriented individual desires and subtle collective orientations of the previous Subtle tier. This fifth person perspective sees the unilateral creation of meaning making of the earlier person perspectives. Once mature, again, another new collective, which represents the whole of all manifestation, re-shapes the one-way-seeing of the fifth person perspective as the individual falls into a new relationship with the whole of all Totality. The collective sixth-person worldview is formed.

This sketch of the movement from a first-person perspective through a sixth person perspective is a portrait of the relative growth of our worldviews or person perspectives that we mature through. It is the role of individual identities to shape the collectives they just moved beyond to meet their newfound individual needs. Likewise, the role of collectives that are later than the individual is to put boundaries around the earlier level individual orientation. This supports those in preference of an individual worldview to adapt to the collective aspects of reality and the greater good. Alternating back and forth, the individual and the collective preference grows the other up.

ULTIMATE COLLECTIVES: GROWING UP AWARENESS.

All of relativity sits in the field of maturing awareness. Dan Brown[6] has clearly and cleanly described the path of development of the realization of awakened awareness through his descriptions of vantage points. A vantage point refers to the level of awareness that you are viewing reality from. Collective orientation from this kind of view creates an entirely different definition of the notion of "collective". These Vantage points are outlined by Dustin Diperna[7] in his book, "Streams of wisdom".

Brown's first vantage point level is that of "awareness". This is a realization that awareness is different from and separate from thought. We know this because we can watch our thoughts from this vantage point of awareness. Thought becomes an object of our "awareness".

The second vantage point level relates to the capacity to see that awareness is beyond one's personal individual identity, whether a first-person identity, a third-person identity, a fifth-person identity or beyond. One's personal identity becomes an object of "awareness itself".

At some point a new level of awareness matures, and one comes to see that time and space have a quality of always being ever present in the here-and-now. Time and space become an object of "awareness-in-and-of-itself", where awareness becomes a field of "boundless changeless awareness" being observed as an object by a witness of awareness. As this matures and grows, one can experience all thought, selves, and time/space arising within and as this ocean of awareness which we all share together and which holds all the relative individual and collective worldviews that have been developed to that point in time, whether a first, second, third, fourth fifth or sixth person perspective or beyond; the witness just watches this incredible display of all manifestation within this sea of awareness. This is quite a different image of collectiveness than one perceives at the relative levels described above.

Once the witnessing capacity collapses into this field with the view from everywhere and nowhere, "awakened awareness" is said to occur.

ENLIGHTENMENT'S LEADING EDGE: A POSSIBLE DEFINITION?

With the relative developmental worldviews and person perspectives arising within the more ultimate view of the ever-widening capacities of awareness, we might define collective enlightenment as the convergence between the relative and the ultimate which results in a unification. Awareness, in some form, whether a seed or a fully blossomed limitless ocean seems to simply open to whatever can come into its never-ending field. It seems to always have been there in some form or another if we could but apprehend it. The relative is filled with transformations of the never-ending evolution of perspectives and worldviews. If one has the full realization of the vantage points through Awakened Awareness, enlightenment continues to be re-shaped by the leading edge of the progressive worldviews that continue to evolve. A combination of worldview/person perspectives in some form can let us know that enlightenment is never done even if one has realized Awakened Awareness which is limited by the worldview perspectives it can unify with.

Ken Wilber[8] has outlined this process in his description of the Wilber-Combs Matrix and Integral Theory. He uses the terms "Gross, Subtle, Causal, Witnessing and Non-Dual" as synonyms of Brown's vantage points[9].

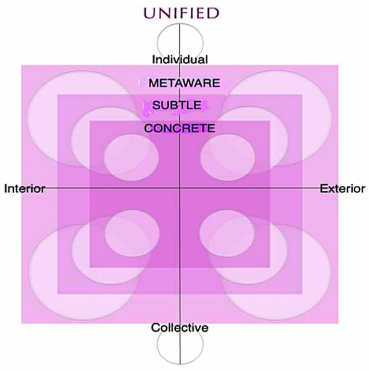
THE TRIADIC POLAR PAIRS: A HISTORIC INQUIRY

While the progressive coming together of the Vantage points with the maturing person perspectives brings so much clarity to the understanding of collective enlightenment, there are additional distinctions we can make related to the different ways that spiritual traditions create Awakening paths in individual and collective approaches. These distinctions can be made using the STAGES assessment methodology[10]. The STAGES assessment methodology is created from the three polar pairs that make up part of Ken Wilber's four quadrant Integral Theory MAP.

This map is formed by the intersection of the polar pair, the interior and the exterior, which is intersected by the second polar pair, the individual and the collective (see the quadrant map below). This creates the four quadrants. In addition, one can section the human parts of these quadrants off to create four tiers: the Concrete tier, the subtle tier, the MetAware tier and the Unified tier.

By sectioning the human spaces within the quadrants into tiers one can see new, more graduated definitions of worldviews: Concrete individual and collective worldviews, Subtle individual and collective worldviews, MetAware individual and collective worldviews and the Unified views.

In addition, each worldview/perspective is represented in each quadrant space as an early, in-the-moment manifestation (inside circle spaces) and a mature manifestation (outside circle spaces). These provide the third polar pair. Wilber calls these spaces "zones"[11]. When we put the three polar pairs, modified by the Concrete, Subtle, MetAware and Unified tiers, a more granular human map is created. This map puts worldviews and perspectives within its spaces, while the boundless changeless awareness of the vantage points might be represented by the witnessing awareness of all the experience represented by that map. If witnessing awareness can only see the Concrete tier worldviews and perspectives, it's awakened awareness would be limited to the unification with the concrete. If witnessing awareness can see the Subtle tier worldviews and perspectives, it's awakened awareness would be limited to the unification with the concrete and the subtle, and if witnessing awareness can see the Concrete, Subtle and MetAware worldviews and perspectives, it's awakened awareness would be limited to the unification with the concrete, subtle and metaware views. Eventually, awakened awareness could be unified with what is represented by the entire Integral map, including the worlds of matter, and life, as well as the world of mind[12]. But with this map we can now ask what effect the three polar pairs have on these experiences. Can these pointers explain some of the differences in the descriptions of enlightenment of the various spiritual traditions?



The Integral MAP with Tiers and Zones.

Brown[13] and Engler[14] show that while there is a single path to awakening through the spiritual traditions represented by the vantage points, the actual experience of awakening or enlightenment can be different.

In his book, Streams of Wisdom, Dustin Diperna[15] shares descriptions of three traditions as related to

Brown's vantage points: the Tibetan Buddhist tradition, the Tantric Hindu tradition and the Islamic tradition. Brown[16], in the book, Transformations of Consciousness, describes the paths of the Mahamudra, the Theravada Buddhist path, and the Hindu path. Ken Wilber[17] shares his views of the Vedanta, the Buddhist Mahasamghika tradition, the Buddhist Yogachara tradition (mind only), the Dzogchen tradition, and Christianity in his audio on "Esoteric Christianity, the Five Non-dual Traditions, Part three". This research seems to indicate that some traditions focus on the bringing together of subject and object (The Hindu, Vedanta tradition, the Buddhist Mahasamghika tradition and the Yogacara traditions for example). Subject usually refers to ones' sense of interior identity. Object usually refers to anything that is exterior to one's interior. The realization of the coming together of subject and objects through undifferentiated oneness, putting qualities to the objects, or not splitting object off from subject all seem to refer to the horizontal interior exterior polar pairs on the Integral Map.

The Christian tradition seems to focus on the coming together of the individual with God, and each other in the injunction "Love God with your whole mind, and heart" and "love your neighbour as yourself". Likewise, the Islamic tradition seems to have this connection between the individual consciousness and God Consciousness[18]. These traditions seem to unify the individual and collective poles of Wilber's quadrants.

Related to the third polar pair, the insides and the outsides of the zones, where in-the-moment experience represents the inside spaces of each zone and the trajectory of time represents the outside aspects of the zones, the Dgogchen tradition seems to exemplify the unification of these poles by, bringing together time and the timeless[19] which is pushed away when one is "seeking".

When we add the granulated spaces of the three tiers, the person perspective-worldviews and the widening vantage points of awareness we can see the possibilities of the many experiences of unification and the possibilities of expressing different collective enlightenment experiences. Some may focus on the subject object unification. Others may foreground the unification of the individual and the collective, and still others the unification of time and the timeless. Could this open the possibilities for all three of these different enlightenment experiences to come together for a full expression of balanced collective enlightenment?

The worldview perspectives as well as the vantage points tend to favour one or the other of these primal pairs.

Transforming from one tier to the next would emphasize subject object processes for this is the transformation where you receive a new identity (a new self) and that self has a whole new sea of objects to apprehend. This seems to open the vantage point of "awareness". The first place this would occur would be in the movement from animal consciousness to human consciousness.

Transforming from one perspective to another within a tier (such as from the first to the second person worldview in the concrete tier; and the third to the fourth person worldview in the subtle tier) would emphasize the unification of the individual and the collective, giving one experiences that might be described as "going beyond self" or "Awareness itself".

Transforming within a perspective from immaturity to maturity would give someone practice in bringing together the insides of the zones with the outsides of the zones. In experience this would relate as well to the vantage points of "awareness in and of itself", which relates to time, timeless, and non-seeking.

history, these worldviews and person perspectives have evolved. Could it be that the vantage points, which seem to have always been there and available to anyone who could access them, simply expanded to accommodate these arising perspectives? Could it be, that different traditions coalesced around the emphasis of particular polar preferences over periods of hundreds of years, that those primary qualities conditioned different experiences of enlightenment that remain with us to this day? Is it possible that this colours our own individual experiences, unconsciously?

THE TRIADIC POLAR PAIRS: AN INDIVIDUAL INQUIRY TOWARDS TRIADIC COLLECTIVE ENLIGHTENMENT

Some traditions seem to foreground one polar pair over others as a primary emphasis of their tradition: the interior subject and the exterior objective which cycles from one tier to the next; the individual and the collective which cycle from one perspective/worldview to the next; and the inside momentariness with the trajectory of the past and/or future time which matures each person perspective. One or the other of these preferences seem to be a basic underpinning of spiritual practices, supported by the vantage points which themselves seem to have a focus on the polar pairs. Separating awareness from thought seems to be a subject/object practice. Separating awareness from self-identity seems to be an individual/collective practice. Bringing together the three times into the still oneness of non-seeking seems to be expressing an inside circle, to an outside circle space. Each seems to be a

refinement of the previous experience. Are the triadic polar pairs endemic primordial forms of cyclic experiences that mature with the arising of the relative worldview/perspectives within the vantage points of awareness? Could this map to individual experiences? We can explore this by looking at how these arise individually in the various tiers.

THE CONCRETE TIER

Moving into the human Concrete tier begins with the original creation of an individual worldview and first person perspectives. Having a first-person perspective identifies someone with their concrete material body and their action orientation towards the concrete world they live in. They gradually differentiate their concrete self from mother and apprehend concrete objects outside of the self. The kind of understanding in this tier might be called "knowing awareness" since it is the first budding of human consciousness and thought which seem fused. Human Perspectives and human identities are arising for the first time and subject/object differentiation begins to occur for the first time in the human individual.

A perspective shift occurs in the individual when the second person perspective arises. "Knowing awareness" has to widen out to recognize that other humans are not an object but a collective of other humans, "like me". For the first time, there is a building of a human collective experience. We see this in the story of the Garden of Eden when Adam and Eve become awake to their second person perspectives by being able to see each other reciprocally, and becoming shy of their nakedness (just as children become shy when they finally recognize that there are other people who see them).

A third shift occurs when this second person perspective matures in a way that memory is stable and they can recognize time which is related to the past. For the first time, the notion of "time" is invented along with ways to measure it.

The Concrete tier appears to create subjects vs. objects, individuals vs. collectives, and time vs the timeless. The three triadic pairs arise. One cannot unify what cannot be seen or experienced, so unification with one or more of these triadic pairs might be more likely toward the later part of the Concrete Tier perspectives.

THE SUBTLE TIER

The relative view of an individual third person perspective arises at the beginning of the subtle tier. This is an intense phase of individuation with a realization of a subtle personality identity rather than a concrete one. The interiors of the individual become strong and developed in these perspectives and they experience subtle desires and aversions and they do what they can to own or avoid the subtle things that they encounter. They focus on the concrete and subtle objects that they desire and may suffer when they don't get them. The third person perspective explores subtle subjects vs. subtle objects, or the horizontal poles of interior and exterior. To do this, they must be able to have a different kind of awareness. Perhaps we can call this "metacognitive awareness" (Dan Brown uses the notion of metacognition) where the individual can zoom into the differences between a concrete object and self and a subtle object and self.

When we apply the beginning stages of vantage points here, these individuals, with arduous practice, may be able to realize the separation between "knowing awareness" and thought with concentration practices. However, it may be more difficult for them to unify themselves with the collective since they are separating from their previous collective and trying to individualize the members of that collective by creating laws and rules that support this new third person individual consciousness.

Since they now are seeing into the future for the first time. They have a better possibility of apprehending the timelessness of the three times and to be able to use their meditation practice to experience "boundless timeless awareness", as they move from the early part of the third person perspective to the mature third person perspective. However, the interior and the exterior subject/object poles may come together more easily than the other polar pairs at this point in the Subtle Tier since the building of a subtle identity is the primary task at this point.

The fourth person perspective is another collective stage where recognizing the relativity of triggers, judgments, assumptions, subtle energies in relationship to others in their community seems to be prominent. Seeing one's own judgments, assumptions of others, complicity, and projections on others would seem to necessitate zooming out with "metacognitive awareness" to capture the largeness of the contextual and complex adaptive systems. Here the individual and the collective poles come together on a subtle level and one understands that they are subjected to being shaped by the contextual and by complex adaptive systems. This seems to support the vantage point of separating the individual subtle self from Awareness (the "Awareness itself" vantage point), as well as a focus towards the unification of the individual and the collective. Metacognition is what forms assumptions, judgments, complicity and projections. To take a perspective on metacognition, "awareness itself" may be required.

The level of complexity increases in the Subtle tier, and the cyclical returns of these three practices of subject and object interior and exterior; the individual and the collective; and awareness of time and the timeless (as the relativity of time) with the possibility of boundless changeless awareness; appears possible in the Subtle tier. In the Concrete tier, these concepts were being created for the first time. In the Subtle tier, one can begin to take metacognitive perspectives on these concepts and gradually realize their relativity.

THE METAWARE TIER

This tier continues the cyclical movement of these three polar pairs but while individuals have had possibilities of glimpsing the vantage points in the previous two tiers, the worldviews and person perspectives at the MetAware tier are far rarer, and begin to look much like the vantage points themselves. In this tier, there seems to be a natural shift of identity from concrete or subtle selfness to the vantage points of awareness as self.

While we know that this shift can occur much earlier than the MetAware tier, it seems to be a definition of the MetAware tier for this shift to begin to occur, if this hasn't already.

AN INQUIRY OF BALANCE

This inquiry might lead us to visit and revisit these three cycles of polar pairs each of which have changing cyclical preferences as they grow through the tiers, and to consider connecting vantage tier practices to their natural perspective conditions. Each tradition seems to have some rendition of all three of these polar pairs even though they may prefer one of them more and this may colour their experience of enlightenment. With balance between them all, and targeting our practices to the natural arising of perspectives as they occur, we may enhance our individual and collective experiences of enlightenment. This is an inquiry that invites research.

♦

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ALLAN COMBS

CONSSCIOUSNESS, COLLECTIVE CONSCIOUSNESS, ENLIGHTENMENT, AND COLLECTIVE ENLIGHTENMENT

Allan Combs, PhD, is a consciousness researcher and author. His books include Consciousness Explained Better, The Radiance of Being, and Synchronicity Through the Eyes of Science, Myth and the Trickster. *He is Professor of Consciousness Studies at the California Institute of Integral Studies.*

COLLECTIVE CONSCIOUSNESS

TAKEN TOGETHER THE TERMS IN THE TITLE NAME four fuzzy sets that combine to make a single huge fuzzy-fuzzy set. Mapping them into each other is like mapping mist into clouds. I have already written at length about the difficulties with the word "consciousness" and will not belabour them at length again here. I only say that, for myself, I use the word "consciousness" in the simplest sense possible, that is, "what it is like, " for example to be awake, to be dreaming, or eating cherry cobbler. I especially hope to avoid abstract theoretical descriptions involving "qualia" and the like (See Chalmers, 1995).

Skipping over this Gordian knot of consciousness itself, let's move on to the topic of "collective consciousness. " On first glance its meaning may seem self-evident. But let's reflect. Depending on the context of the phrase, it might point to some broadly based aspect of the social milieu such as a growing awareness of women's rights, or the appreciation of cultural diversity. All good, but in this article I intend to stick with the essential philosophical notion of consciousness as "what it is like." This is a subjective idea of consciousness, contrasted to a social or moral one.

Consistent with the above, let's ask what the idea of "collective consciousness" might mean in a subjective sense. It seems to imply something about shared consciousness, or in other words subjective experience common to more than one person at the same time. Again, this seems a simple idea at the start, but if we dig down it becomes more and more subtle and enigmatic as we go along. For example, if two people listen to a piece of music together, are they actually *sharing* a musical experience? Or is each having his or her own individual experience with some features in common? If both parties are deeply absorbed in the music, and perhaps both have similar and profound emotional responses to it, are they then having a common conscious experience? To take a step in a somewhat different direction, can lovers experience unity in love-making to the extent that they entirely loose the sense of separateness? In such instances, there seems an actual intersubjective fusion of the conscious experience.

Intersubjectivity has been an important topic in 20th century European philosophy, and also in psychoanalytic thought. It played an important part in Edmund Husserl's original phenomenological ("logical") investigations, and was transformed by Martin Heidegger in a shift away from its grounding in epistemology to an ontological emphasis on *being*. The work of these two philosophers has been a major influence in European philosophy, but unfortunately it has been obscure if not inscrutable to most English speaking readers. Interestingly though, it had a deep influence on post-Freudian psychoanalytic thought (See, e.g. Brown, in press; Thompson, 2005). I leave this curious topic to the interested reader.

Beyond formal philosophy and psychoanalytic considerations, the influence of phenomenology has been widely felt in the writings of mid-20th century existentialists such Jean Paul Sartre and Martin Buber. The latter expressed his important ideas about intersubjectivity through his concept of the *I-Thou* relationship. He wrote: "When I confront a human being as my Thou and speak the basic word I-Thou to him, then he is no thing among things nor does he consist of things. He is no longer He or She, a dot in the world grid of space and time, nor a condition to be experienced and described, a loose bundle of named qualities. Neighborless and seamless, he is Thou and fills the firmament. Not as if there were nothing but he; but everything else lives in his light." (1970: 59).

Not only does Buber seem to write of an intersubjective space shared by I and Thou, but he also evokes a profound spiritual sense that boarders on

mystical. For him, all truly authentic relationships between people share this hallowed depth. Thus, all authentic relationships share this intersubjective feature. Intimate relationships flourish in it.

Philosopher Christian de Quincey has written an entire book convincingly and clearly arguing for intersubjectivity as the basic ground of our subjective lives. According to de Quincey we are constantly surrounded and absorbed in the intersubjective realities we share with one another. But we are like fish that fail to notice they live entirely in water. The essential substance of this common intersubjective milieu is shared feeling and emotion rather than shared thoughts, which rarely break through the surface of consciousness to garner our attention. When they do, we often find ourselves surprised or even delighted that someone nearby is thinking, or even saying exactly what we are thinking or saying. In long-term relationships this sort of thing may occur so commonly that it is often overlooked, no longer eliciting surprise (Also see Carpenter, 2012).

Indeed, it is this writer's opinion that many seemingly random thoughts and images that find their way into our minds every hour of every day may well have their origins in, or at least are shared, by the minds of others. "Mind-wandering" has been studied at length in neurological laboratories, but no researcher has a clue as to where the actual thoughts come from (e.g., McVay, Kane, & Kwapil, 2009).

Now, part of the challenge of trying to study intersubjective experience is that our best laboratory methods, ranging from card guessing experiments to distant viewing protocols, understandably rely on objective information. All are essentially objective approaches to subtle connections or shared experience. It is worth noting, however, that some of the most reliable forms of psi seem to involve emotions or feelings. For example, if previously unseen photographs are flashed before an observer, disturbing images, for example violence or torture, are anticipated by autonomic stress responses coming from the viewer even before the images are seen. This is a reliable effect, and demonstrates an emotional sense of the immediate future prior to information about it. In perhaps related studies, Dean Radon (2009) and others have shown departures from randomly generated activity when major events such as 9-11 draw the attention of large numbers of people throughout the world. It is as if the emotional force of these events tilts the very fabric of reality. One is reminded of the many premonitions and dreams associated with the 1912 sinking of the Titanic, a powerful and broadly experienced emotional upheaval.

In 2003, journalist Lynne McTaggart published the first of a series of books exploring the idea that biological systems, including human beings, participate in extensive energy fields closely associated with consciousness, and the source of subtle phenomena such as psychic healing. The book received high praise from Arthur C. Clarke and many others. Its basic message is that we all live in something like a subtle energy sea, which we unknowingly interact with. Again, the idea of the fish living in its own element without awareness. One aspect of such an energy sea must surely be shared or intersubjective consciousness because it is simply unimaginable that it exists outside of human consciousness.

All interactions with this field appear to involve living organisms. Despite all the sophisticated measurement devices of modern science, there seems no way to measure or assess it that does not involve life. We can, however, get some sense of the scale of the field when we consider that a sufficient number of meditators can evidently effect and lower the crime rate in an entire city (Dillbeck, Landrith, & Orme-Johnson, 1981). The events surrounding the sinking of the Titanic, and more recently 9-11, suggest subtle field effects can be virtually limitless in scope. Nevertheless, most examples of intersubjectivity involve fewer numbers of individuals in closer proximity. A good example is the Quaker "gathered meeting, " in which each member of a small Quaker community, silently meeting together on a Sunday morning, becomes aware of a shared sense of togetherness; a bonding of consciousness itself that is palpable to everyone present. This is a unified sense of groundedness in a single event of awareness.

We might also think about the occasions of shared experience described by members of primary cultures. These have been reported, for instance, among Australian aboriginal peoples, Amazonian tribes, and traditional peoples of India. In a classic work on communal vision-sharing among upper Amazonian peoples, herbalist and explorer Manuel Córdova-Rios gives an account of entheogen facilitated group experiences of the appearance of animals.

The group then entered into what may be described as a shared experience of vision. After an initial chaotic flux of organic images and designs, arabesques in blues and greens, a collective fantasy developed in which a 'parade' of birds and animals began to pass into the group's awareness. Following the chief's cue the hunters would shift the chant, enabling them to use the particular song (*Icaro*) associated with each of the jungle creatures as it passed before them. Evidently the group had evolved this method to coordinate

their visions, so that they could then collectively imagine a similar scene of forest life. Accordingly, following their group witness of the wild creatures one after another, each of the tribal members were better able to appreciate the instinctual nature of such an animal or a bird, and the stealth and techniques of their fellow hunters, all of which could be scrutinized and delicately appraised in each mind's eye. Several of such hunting scenes, later conveyed in elaborated stories, might then be carefully assimilated. The experience naturally worked to coach each hunter to improve his skills, e.g., shooting arrows that hit their mark, or restarting his tracking intuition (1971: 37-40).

Reports from other oral cultures such as the Australian Aborigines (e.g. Hume, 2002) as well, hint that collective experiences may in fact be more common than many of us might suspect. For instance, Keeney (2005, 2007), who spent considerable time with the Bushmen (the San people) of Africa writes: "The Ju/'hoansi Bushman *n/om-kxaosi* (shamans) of Namibia and Botswana are quite familiar with 'collective consciousness' and one could say that experiential unions of relationship are the heart and soul of their healing work. [In the strongest of such experiences] one's consciousness will seem to slide or slip into another domain of being where one merges with the knowing of previous ancestors. In this domain of collective consciousness, sometimes called a 'classroom' by the Bushmen, you receive knowledge. It is visionary and is directly absorbed – like being downloaded. Here songs, dances, information about plants, beadwork, and all kinds of matters are passed on." (Keeney, March 3, 2008, personal communication; also see Keeney, 2005; 2007).

At the turn of the 20th century many explorers of the mind such as Henri Bergson, William James, and the influential but now nearly forgotten Frederic William Henry Myers (1907), believed in a deep communal or "cosmic consciousness" that suffuses and undergirds ordinary individual consciousness. Bergson believed the function of the brain is that of a "reducing valve" which limits the expansive presence of cosmic consciousness to a small practical point of focus. For example a cheetah hunting an antelope must focus all of its attention on its prey, while the antelope, if it is to survive, must centre all of its attention on escaping. For Bergson, dealing with the realities of the physical world requires a radical reduction of the full potential bandwidth of consciousness, which nevertheless occasionally breaks free, opening up to experience the grandeur of unbounded cosmic consciousness, which in some sense is deeply shared by everyone. James gives us two often-quoted metaphors for this.

> Out of my experience, such as it is (and it is limited enough) one fixed conclusion dogmatically emerges, and that is this, that we with our lives are like islands in the sea, or like trees in the forest. The maple and the pine may whisper to each other with their leaves… But the trees also commingle their roots in the darkness underground, and the islands also hang together through the ocean's bottom. Just so there is a continuum of cosmic consciousness, against which our individuality builds but accidental fences, and into which our several minds plunge as into a mother-sea or reservoir (1909: 589).

> We hear much less about cosmic consciousness today, but the concept of *nondual consciousness* has become fashionable, taking on features previously attributed to cosmic consciousness. For instance, it is said to be "nonlocal, " a property that readily associates with certain aspects of quantum physics. This also suggests that the minds of individual persons can be "entangled, " a term used in physics to indicate that seemingly separate events, such as the experiences of separate brains, might in a fundamental way become unified. The appearance of separation may actually be illusory. A deeper unity lies behind the appearance of separation. Physicist David Bohm employed the metaphor of a goldfish in a tank, viewed with several TV monitors connected to separately placed cameras, say, one in front, one to the side and so on. Seen through these cameras there will appear to be two or more fish, different but highly coordinated in their movements. But seen from a higher or multidimensional perspective there exists only one goldfish.

I think we can say with some confidence that, for all intents and purposes, the notion of nondual consciousness is an echo of the much older notion of cosmic consciousness. Differences between the two may reflect more about individual writers as well as the historical periods that gave birth to their reports. A complete analysis of this matter, however, would take us well past the limits of this essay.

ENLIGHTENMENT AND COLLECTIVE ENLIGHTENMENT

Let's first take a look at *enlightenment*. The word itself is as many-sided as the word *consciousness*. It derives from the idea of 18th century European Enlightenment, a revolutionary movement of thinkers such as Francis Bacon, René Descartes, John Locke, Voltaire, Rousseau, Benjamin Franklin, and many others. But the term also suggests light or illumination, and over time acquired a spiritual ambiance. By the second half of the 20th century this latter sense of enlightenment

had shifted from an adjective that characterizes certain spiritual attitudes or beliefs – "he seems a spiritually enlightened person" – to a noun that identifies a state of being: *enlightenment*. This modern use of the term has been adopted back into translations of traditional Asian and other texts, so that it is now often used to represent a seemingly ancient and universal idea of ultimate spiritual experience or growth. As such, it suggests ideas such as boundless joy, eternal life, ultimate knowledge, and so on. It is worth noting, however, that traditional spiritual texts designate more specific qualities for the highest levels within their systems of thought and practice. Metaphors such as awakening, realizing one's true self, death of ego, release from illusion, the peace that passes understanding, boundless love, and so on, represent the different goals and aspirations of such traditions.

The above in mind, perhaps the realities that come closest to the notion of collective enlightenment are those such as the "gathered" Quaker meeting experience, or group meditation experiences such as reported by TM practitioners, and other group activities such as Sufi dervish dancing, chanting, and song and music group experiences that lead to degrees of ecstatic absorption. The list is quite long, but we see where it is going.

COLLECTIVE MIND IN FANTASY LITERATURE

From Olaf Stapledon's 1937 *Star Maker* novel: "It must not be supposed that this strange mental community blotted out the personalities of the individual explorers. Human speech has no accurate terms to describe our peculiar relationship. It would be as untrue to say that we had lost our individuality, or were dissolved in a communal individuality, as to say that we were all the while distinct individuals. Though the pronoun "I" now applied to us all collectively, the pronoun "we" also applied to us. In one respect, namely unity of consciousness, we were indeed a single experiencing individual; yet at the same time we were in a very important and delightful manner distinct from one another. Though there was only the single, communal "I" there was also, so to speak, a manifold and variegated "us," an observed company of very diverse personalities, each of whom expressed creatively his own unique contribution" (Chapter 8: 62).

Olaf Stapledon was a British moral philosopher and perhaps the most visionary science fiction writer of all time. His fictional representations of the future evolution of the human race displayed a remarkable intelligence, not only of future societies and fantastic modifications of the human body, but most remarkably his ideas of possibilities for consciousness. These were developed in three of his novels: *Last and First Men* (1930), the largest of the three; *Odd John* (1935) characterized by prominent science fiction writer Damon Knight as "The first superman story and still by all odds the best;" and his masterwork, *Star Maker* (1937). In each of these novels he explored the possibilities of future humanity as it ascends to the highest possible levels of evolutionary expression. These towering levels were said to be very rare, however, only manifesting in the most rare of instances for which conscious beings were able to overcome economic strife and endless warfare. Stapledon writes: " In these few worlds […] there occurred a widespread and almost sudden waking into a new lucidity of consciousness and a new integrity of will. To call this change miraculous is only to recognize that it could not have been scientifically predicted even from the fullest possible knowledge of "human nature" as manifested in the earlier age. To later generations, however, it appeared as no miracle but as a belated wakening from an almost miraculous stupor into plain sanity." (Chapter 9: 65).

Today such dramatic and unpredictable transformations are well known to chaos theory, and seen in complex systems ranging from ecologies to climate systems, and implicit in human psychological growth and change (e.g., Combs, 2015).

Though not well known to most science fiction readers even today, Stapledon's visionary writings had a deep impact on many mid-20th century scientists and writers such as Arthur C. Clark. The latter incorporated them into his remarkable 1953 book, *Childhood's End*, which depicted the transformation of the human race to a stage of conscious evolution that we are not yet ready to understand. In it he wrote:

And at the end of the… path? There lay the Overmind, whatever it might be, bearing the same relation to man as man bore to amoeba. Potentially infinite, beyond mortality, how long had it been absorbing race after race as it spread across the stars? Did it too have desires, did it have goals it sensed dimly yet might never attain? Now it had drawn into its being all that the human race had ever achieved (1953: 242).

Childhood's End was the inspiration for Stanley Kubrick's celebrated and powerful 1968 film, *2001: A Space Odyssey*, still considered by many, including the present writer, the finest science fiction film of all time. Interestingly, the year 1968 was a pivotal time for many aspects of history that involved consciousness. John Lilly's explorations of consciousness in the flotation tank, and Timothy Leary's explorations

with LSD were drawing wide interest among young adults. The psychedelic era was at its height in the United States and Western Europe, and the human potentials movement, cantered at the Esalen Institute on the north coast of California at Big Sur, was becoming a leader in the exploration of human possibilities (Kripal, 2007). Robert Ardrey's 1961 book, *African Genesis*, was drawing considerable attention to the history of human evolution and consciousness, directly influencing the opening scenes in *2001: A Space Odyssey*. The present writer was in his mid-20s and reading Robert Ardrey beside John Lilly. The Beatles had recently released the *Sgt. Pepper's Lonely Heart Club* album. It was a very heady time for discovering consciousness.

All of these influences are continuing to flow forward fifty years later. And as Stapledon warned through his visionary writing, many of the signs of dramatic transformation are ripe, as is the yawning chasm of collapse, uncomfortably near our feet. This moment more than any previous moment in history is our time to fall dreadfully backward or leap forward into the opportunity of a luminous future.

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Enlightenment is man's release from his self-incurred tutelage.

Immanuel Kant

Enlightenment is ego's ultimate disappointment.

Chögyam Trungpa

Enlightenment must come little by little,
otherwise it would overwhelm.

Idries Shah

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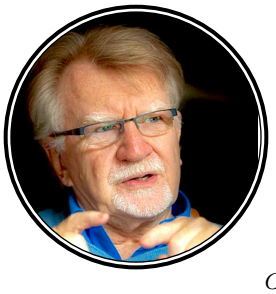
RICHARD BARRETT

THE EGO-SOUL DYNAMICS OF ENLIGHTENMENT



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Richard has been a visiting lecturer at the Consulting and Coaching for Change, Leadership Course run by the Saïd Business School at the University of Oxford and HEC in Paris. He has also been an Adjunct Professor at Royal Roads University, Institute for Values-based Leadership, and a visiting lecturer at the One Planet MBA at Exeter University. Richard is the author of A New Psychology of Human Well-Being: An Exploration of the influence of Ego-Soul Dynamics on Mental and Physical Health *(2016),* The Metrics of Human Consciousness *(2015),* Evolutionary Coaching: A Values-based Approach to Unleashing Human Potential *(2014),* The Values-Driven Organisation: Unleashing Human Potential for Performance and Profit *(2013),* What My Soul Told Me: A Practical Guide to Soul Activation *(2012),* Love, Fear and the Destiny of Nations: The Impact of the Evolution of Human Consciousness on World Affairs *(2011),* The New Leadership Paradigm *(2010*), Building a Values-Driven Organization: A Whole System Approach to Cultural Transformation *(2006),* Liberating the Corporate Soul: Building a Visionary Organization *(1998), and he is a contributing author to* Psychometrics in Coaching *(2012).*

WHAT IS ENLIGHTENMENT?

We tend to think of enlightenment as an end-state – a goal to be achieved. I prefer to think of it as process of learning. If you are a human being living on planet Earth, whether you are aware of it or not, you are involved in this process.

If enlightenment is a process of learning, the next question that arises is, what is it we, as humans living in a material universe, are trying to learn?

I believe what we are trying, not just to learn, but to embody, are the underlying principles that govern the operation of our universe: Not our three-dimensional material universe, which is a property of our perception, but the underlying four-dimensional energetic universe that is the container of our three-dimensional material universe. This four-dimensional energetic universe is the world of the soul.

We make progress in our journey towards enlightenment in our three-dimensional material world to the extent we stop identifying with our ego and start identifying with our soul.

THE EGO

The ego is a field of conscious awareness that identifies with your physical body. Because the ego believes it inhabits a body and lives in a material world, it lives in three-dimensional reality and thinks it can die. Because it thinks it can die, it thinks it has needs, and because it thinks it has needs, it develops fears about not being able to get its needs met. The principal needs of the ego are survival, safety and security. The ego-mind is the creation of the soul-mind. The soul creates the ego to protect itself from the pain (energetic instability) it experiences being present in three-dimensional material awareness[1].

The ego is not *who* you are; it is who you think you are. It is the mask you wear to get your needs met in the physical, social and cultural framework of your material existence. The ego represents your sense of identity in relation to others and the social context in which you live. Your ego identity begins to form during the first two-to-three years of your life, and if all goes well, it reaches a natural resolution during your early 20s as you become a viable and independent member of your community in the cultural framework of your existence. When you get to this stage in your life, you normally respond to the question "Who am I?" by stating your age, gender, role/occupation, race, religion and nationality. These are the things that define your ego identity.

THE SOUL

Your soul is a field of conscious awareness that identifies with your energy field. It is who you are. You don't have a soul, you are a soul. Your soul and the soul of every other human being is an individuated

aspect of the universal energy field from which everything in our physical world arises. Because the soul identifies with your energy field and not with your physical body, your soul lives in four-dimensional energetic reality. The soul knows it cannot die and consequently, has no fears. Not only does the soul have no fears, it also has no needs. The reason it has no needs is that at the energetic level of its existence it creates what it desires through its thoughts.

Because our souls are individuated aspects of the universal energy field, they feel a sense of connectedness to every other soul. Consequently, at the soul level, we live in oneness. There is no separation. When you live in a world of oneness, giving is the same as receiving: when you give to others, you give to yourself.

Even though the soul has no needs in the way that the ego has needs, it does have desires. The soul's principal desires are self-expression, connection and contribution. The soul incarnates into three-dimensional material awareness to fulfil these desires. The purpose of the soul's desires is to recreate its four-dimensional (4-D) reality in three-dimensional (3-D) awareness. When we are able to do this do we begin to reach enlightenment.

You know your soul's desires are being met when you feel your life has meaning; when you can connect with others at a deep level, and when you can use your gifts and talents to contribute to making a difference in the world. The only things preventing the soul from fulfilling its desires are the ego's fears about meeting its deficiency needs: our survival, safety and security needs. The ego's fears about meeting its deficiency needs keep it firmly attached to its physical, social and cultural identity and prevent enlightenment.

The soul incarnates into a human embryo by willing itself to be present in three-dimensional material reality. The soul's will to be present in three-dimensional material reality is the source of the ego's will to survive.

REDEFINING ENLIGHTENMENT

Based on this perspective we can redefine enlightenment as a process of learning to live in soul consciousness (four-dimensional energetic awareness) while being in a physical body in a three-dimensional material world. We achieve enlightenment to the extent that we are able to overcome the illusion of three-dimensional material awareness created by our senses and embrace the principles that govern the four-dimensional energetic world of the soul.

THE PROBLEM WITH PERCEPTION

Even though the human mind/brain is surrounded by frequencies of vibration coming from a larger multi-dimensional energetic continuum, it is constrained in the frequencies it can intercept by the body's five physical senses. Like the dials on a radio receiver, the body's senses can only register a narrow band of frequencies, thereby preventing us from intercepting and interpreting the larger domain of our existence: the four-dimensional (4-D) energetic frequencies of the soul and the universal energy field. What we are not aware of is still there, it is just not in our conscious awareness.

Although mystics and shaman have been aware of the unity of the physical and energetic worlds for millennia, it wasn't until the early part of the twentieth century, with the development of the quantum field theory, that scientists began to acknowledge that there was a crack in our 3-D material interpretation of the world. Albert Einstein (1879–1955) was aware of this crack. He fully recognised that we live in a 4-D energetic continuum. He put it this way:

> The non-mathematician is seized by a mysterious shuddering when he hears of four-dimensional things, by a feeling that is not unlike the occult. But there is no more commonplace statement than the world in which we live is a four-dimensional continuum[2].

Einstein was not alone in this way of thinking. Ervin László, a Hungarian-born philosopher of science, describes the two-world problem in the following way: he calls the observable, manifest, physical 3-D world the M-dimension (M for material or manifest), and he calls the unobservable, energetic 4-D world – the world of the soul – the A-dimension. The A-dimension (Akashic or energetic dimension) is a universal field of information and potentiality that is in constant interaction with the M-dimension: "[…] the A-dimension [energetic] dimension is prior: it is the generative ground of the particles and systems of particles that emerge in the M-dimension [material] dimension[3]."

Max Planck (1858–1947), a theoretical physicist, who was one of the originators of quantum theory, is quoted as saying: "I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness."

Even though we derive our sense of personal reality from focusing our attention on the 3-D material world, what we are observing is just a thin sliver of a much larger energetic world.

One of the links we have to the energetic world is our thoughts. Our thoughts are energetic impulses of positive, neutral or negative intention. Consequently, whatever thoughts you are thinking not only influence the energetic vibration of your energy field (the body-mind) but the energetic vibration of the world around you.

Fear-based thoughts make things feel heavy and serious, whereas love-based thoughts make things feel light and cheerful. This is because the energy of fear has a low frequency of vibration and the energy of love has a high-frequency vibration. Love energy feels light because it connects (people); fear energy feels heavy because it separates (people), it goes against the natural state of energetic order. We feel "at home" in our soul when we love, and we feel "separate" from our soul when we fear. Feelings are the antennae that allow us to tune into the status of our ego-soul dynamic.

When the fear-based energies of the ego-mind are juxtaposed with the love-based energies of the soul-mind, you feel a sense of instability in your energy field and sensations of discomfort in your body. As you release the fear-based energies of your ego-mind and align with the love-based energies of your soul-mind, the ego-mind and the soul-mind come into energetic alignment, and your body feels vital and healthy. This following quote from Maslow describes the process: "[…] the powers of a person come together in a particularly efficient and intensely enjoyable way in which he is more integrated and less split[4]."

The key words here are "he is more integrated and less split". In other words, when we raise the frequency of vibration of the ego-mind by releasing our fears, we align with the frequency of the vibration of the soul-mind.

THE JOURNEY OF THE SOUL

There are seven stages of human development that souls pass through from the moment they enter into our three-dimensional material world (the moment of conception) and the moment they leave our three-dimensional material world (the moment of death). Each stage represents a new and higher level of enlightenment. These stages are shown in the FIGURE.

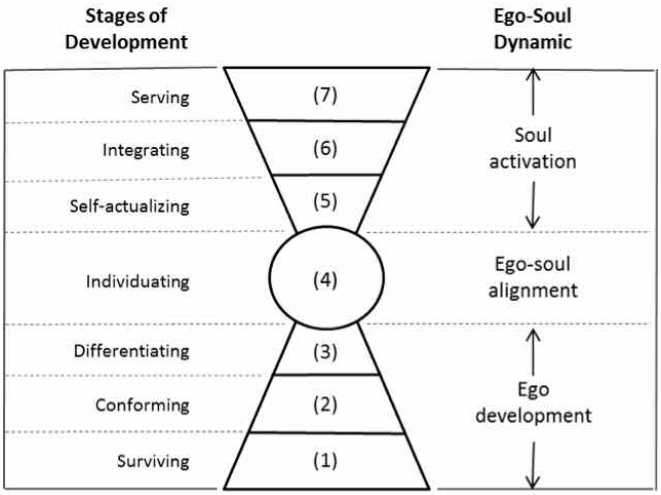

FIGURE ~ *The Seven Stages of Psychological Development and three evolutionary stages of the ego-soul dynamic.*

The first three stages are about the development of the ego, and the last three stages are about the activation of the soul. The fourth stage involves aligning the motivations of the ego with the motivations of the soul. The seven stages of psychological development are also shown in the TABLE along with the approximate age ranges when they occur and the developmental task of each stage.

STAGES OF PSYCHOLOGICAL DEVELOPMENT	AGE RANGES	DEVELOPMENTAL TASKS
Serving	60 + years	Contributing to the well-being of future generations, humanity and the planet.
Integrating	50-59 years	Connecting with others in unconditional loving relationships to make a difference.
Self-actualising	40-49 years	Expressing your true nature by embracing your soul's values and purpose.
Individuating	25-39 years	Discovering your true identity by letting go of your fears and your dependence on others.
Differentiating	8-24 years	Feeling recognised and respected by establishing yourself in a community that values who you are.
Conforming	3-7 years	Feeling safe and protected by staying close to your kin and your family.
Surviving	Conception to 2 years	Staying alive and physically healthy by getting your survival needs met.

TABLE ~ *The Seven Stages of Psychological Development, the approximate age ranges when they occur, and the developmental task at each stage.*

Before restricting its consciousness so it can embark on a journey into 3-D material awareness, the soul is fully centred in 4-D energetic awareness – a world of abundance and love. By choosing to incarnate – restrict itself to 3-D material awareness, it enters into a very different world – a world of limitation and fear.

MATERIAL AWARENESS

The fundamental properties of 3-D material awareness are time, space and matter. By conjoining time and space, we experience the illusion of separation; by conjoining time and matter, we experience the illusion of death and decay; by conjoining space and matter, we experience the illusion of physical forms and mass. Together, taken as a whole, all of these concepts align with the interpretation of reality explained by Newtonian mechanics and the First and Second Laws of Thermodynamics.

ENERGETIC AWARENESS

The fundamental properties of the soul's world – 4-D energetic awareness – are timelessness, omnipresence and energy. Because the soul has no awareness of time or space to give the illusion of separation, the soul experiences a sense of oneness and connectedness. Because the soul has no awareness of time and matter to give the illusion of death and decay, it experiences a state of being (present moment awareness). Because the soul has no awareness of space and matter to give the illusion of form and mass, the soul experiences shifts in energetic vibrations (emotions). Together, taken as a whole, all of these concepts align with the quantum mechanical interpretation of reality, which is explained by quantum theory.

THE SOUL'S DESIRES

The soul's purpose in incarnating is to attempt to recreate its 4-D reality in a 3-D material awareness by a) fully expressing its unique character and gifts, b) by connecting with others in unconditional loving relationships to make a difference, and c) by contributing, through acts of self-less service, to the good of humanity. These three "desires" are the motivations of the soul that drive the 5th, 6th and 7th stages of development.

However, before these desires can be pursued, the soul must establish itself in 3-D material awareness: it must learn how to survive—keep the body alive; it must learn how to be loved so it can feel safe and protected; and it must learn how to be admired and recognised so it can feel secure in its 3-D material reality. The soul delegates these tasks to the ego.

THE EGO'S NEEDS

These three sets of "needs" are the motivations of the ego. They are the drivers of the 1st, 2nd, and 3rd stages of development. Only when we have learned how to master these three stages of development are we in a position to find the freedom and autonomy we need to enter the 4th stage of development. This is the stage of development where we begin to align our ego's motivations with our soul's motivations by letting go of the ego's fears and dependencies developed during the first three stages of development. We have to become a viable independent human being before we can begin to align with the motivations of the soul.

THE JOURNEY BEGINS

The soul's journey into 3-D material awareness begins when it restricts its awareness to material existence by taking possession of the energy field of a human embryo during the first few weeks of pregnancy. This is when the baby's heart starts to beat. The heart and the soul are intimately linked: The energy field of the heart is the access point of the energy field of the soul. At this stage, you are totally heart-centred and the soul mind is the centre of conscious awareness of the embryo.

THE BODY-MIND

Around five weeks later, towards the end of the first trimester of pregnancy, the reptilian mind/brain (body-mind) which has been forming in the background, takes over from the soul mind as the dominant centre of conscious awareness.

The period from conception to the age of 18-24 months, while the reptilian mind/brain is the dominant centre of conscious awareness, is known as the surviving stage of development. The job of the body-mind is to keep the body alive and functioning so the soul has a vehicle through which it can experience 3-D material awareness. The body-mind keeps the body alive by controlling the homeostatic regulation of the body.

When the body-mind takes over as the dominant centre of conscious awareness, the soul mind becomes the subconscious of the body-mind. From this point on, the primary motivation of the foetus and baby is to stay alive.

THE EMOTIONAL MIND

The limbic mind/brain (emotional mind) takes over from the reptilian mind/brain as the dominant centre of conscious awareness when the baby reaches 18-24 months. This is when the ego begins to form. The period from 18-24 months to about 2 to 7 years, while the limbic mind/brain is the dominant centre of conscious awareness, is known as the conforming stage of development.

The job of the ego-mind at this stage of development is to keep the body safe and protected in its family/social framework of existence. The ego mind does this by attempting to build relationships that allow the child to feel loved, accepted and protected.

When the emotional mind takes over as the dominant centre of conscious awareness, the body-mind becomes the subconscious of the emotional mind, and the soul mind becomes the unconscious of the emotional mind. From this point on, the primary motivation of the infant and child is to keep safe.

THE RATIONAL MIND

The neocortex mind/brain (rational mind) takes over from the limbic mind/brain as the dominant centre of conscious awareness around the age of eight and keeps on growing and developing until around the age of twenty-four. The ego continues to develop during this period and remains dominant for the rest of our lives or until the soul mind is reactivated. The period from around 7 or 8 to about 24 years, while the neocortex mind/brain is still growing and developing, is known as the differentiating stage of development.

The job of the ego mind at this stage of development is to keep the body secure and comfortable in its cultural framework of existence. The ego mind does this by attempting to become a recognised and valued member of a group or community.

When the rational mind takes over as the dominant centre of conscious awareness, the emotional mind becomes the subconscious of the rational mind; the body-mind becomes the unconscious of the rational mind, and the soul mind becomes the super unconscious of the rational mind. From this point on the primary motivation of the teenager and young adult is to feel secure.

THE SUPPRESSION OF THE SOUL

During the first three stages of development as the ego's needs assume greater prominence, the soul's desires get pushed further and further into the background. If the ego's motivations are strong and deeply embedded because of difficulties it had in getting its safety and security needs met, the ego's motivations may stay dominant for the rest of your life.

ACCESSING THE SOUL

The fourth stage of development –the individuating stage – is the stage you must master to reactivate your soul awareness at the 5th, 6th and 7th stages of development. The goal at the individuating stage of development is to find freedom and autonomy – to let go of your social and cultural dependencies – so you can become responsible and accountable for every aspect of your life.

The ego is not *who* you are; it is who you think you are. It is the mask you wear to get your needs met in the physical, social and cultural framework of your material existence. The ego represents your sense of identity in relation to the physical, social and cultural context in which you live. You must remove your ego mask to find your soul self.

ACTIVATING THE SOUL: SELF-EXPRESSING

The last three stages of psychological development represent various stages of soul activation. If you have been relatively successful in mastering the individuating stage of development, you will begin to feel the pull of the self-actualising stage of development in your early 40s. Your challenge now is to fully embrace your soul's character and purpose by accessing your inborn gifts and talents and thereby give your life meaning.

If you failed to master your survival needs, the fears you developed about being able to exercise control over your environment will make it difficult to master your soul's desire for self-expression.

ACTIVATING THE SOUL: CONNECTING

The next stage of soul activation– the integrating stage of development, which usually occurs in the 50s – involves connecting with others in unconditional loving relationships so you can use your gifts and talents to make a difference in the world. Your challenge now is to develop your social intelligence and empathy skills so you can connect and collaborate with others and thereby use your gifts and talents to make a difference in people's lives.

If you failed to master your ego's safety needs, the fears you developed about forming relationships will make it difficult to master your soul's desire for connection.

ACTIVATING THE SOUL: CONTRIBUTING

The last stage of soul activation – the serving stage of development, which usually occurs in your 60s – involves living a life of self-less service focused on future generations and the good of humanity. Having learned how to connect, what you are now tasked with doing is making a contribution to the common good. Your challenge now is to develop your compassion skills – to embrace the deepest aspects of

your soul's intelligence and wisdom to help those who are suffering, disadvantaged or are less well off than yourself.

If you failed to master your ego's security needs, the fears you developed about being able to become a valuable member of a community will make it difficult to master your soul's desire to make a contribution.

PROGRESS TOWARDS ENLIGHTENMENT

How well your parents, guardians and teachers support you during the first three stages of development – surviving, conforming and differentiating – not only affects your physical health and mental well-being, during your early life, it also significantly affects your physical health and mental well-being, during the latter stages of your life.

Only when you have learned how to master your survival, safety and security needs and are successful in mastering the individuating stage of development, can you move to the self-actualising stage where you begin to activate your soul-mind.

Mastering the self-actualising stage of development brings meaning and purpose to your life. Mastering the integrating stage of development enables you to make a difference in your world. Mastering the serving stage of development enables you to find fulfilment in your life. By this time, your soul will be fully activated and you will be leading a life of selfless service for the good of humanity. Mastering these three stages of psychological development enables us to embody enlightenment.

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[1] For more information on this topic, consult, Richard Barrett, *A New Psychology of Human Well-being: An Exploration of the Influence of Ego-Soul Dynamics on Mental and Physical Health* (Fulfilling Books: London), 2016.

[2] R. W. Clarke, *Einstein: the Life and Times* (New York: World Publishing), 1971: 159.

[3] Ervin László, *The Self-actualizing Cosmos: The Akasha Revolution in Science and Human Consciousness* (Rochester: Inner Traditions), 2014.

[4] Abraham H. Maslow, *Toward a Psychology of Being* (second edition) (New York: Van Nostrand Reinhold), 1968: 97.

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THOMAS HÜBL ~ JULIE JORDAN AVRITT

TOWARD THE INTEGRATION OF COLLECTIVE TRAUMA IN A TIME OF EXPONENTIAL CHANGE

Thomas Hübl is a contemporary mystic, spiritual teacher, author, and systems-thinker whose work marries modern scientific knowledge with the world's ancient wisdom traditions. For nearly 15 years, he has led international workshops, multi-year training programs, and online courses for students in contemplative and process-based study. Thomas initiated the Celebrate Life Festival, and founded the Academy of Inner Science, and the Pocket Project, whose aim is to explore collective trauma and shadow work, and their integration through large-scale group processes. With support, the Pocket Project has quickly become a global organization and is now researching important aspects of local traumatization. Thomas was born in Austria in 1971. He lives in Tel Aviv, Israel, with his wife, award-winning Israeli artist, Yehudit Sasportas, and their daughter, Eliya. Email: thomas@thomashuebl.com .

Julie Jordan Avritt is co-author, collaborator, veteran ghost, and integral ink beside certain cultural mystics, culture change agents, start-ups, upstarts, & renegades on a mission to think bigger, bigger, BIG. Among other places, her work can be found in a print volume of Kosmos Journal; two volumes of S/tick; Gravel; Visible: A Femmethology –Volume Two; *and in the forthcoming graphic book*, Grand Challenge: How Leaders Grow their Businesses by Addressing the World's Most Intractable Problems, *with stellar visionary, Seth Kahan. Email: juliejordanavritt@gmail.com .*

Our politics, education, and cultural consumption happen on a global scale. Our ethics and morality also need to be globalized. A new global order calls for a new global ethic. A global ethic is the key to addressing the true difficulties of our time. – THICH NHAT HANH.

It's exhilarating to be alive in a time of awakening consciousness; it can also be confusing, disorienting, and painful. – ADRIENNE RICH.

IN ALL EPOCHS AND ACROSS ALL CULTURES, soothsayers, seers, evangelists, and doomsayers have pronounced humanity's imminent demise. "Apocalypse now" – and now, and *now*. Despite the perennial nature of these ominous portents, we have continued onward in every age, not merely surviving, but it seems, thriving. Over time, our numbers have swelled in a giant mushroom cloud; we have travelled to every corner of the globe and some beyond – exploring and experiencing, conquering and colonizing. The warnings of Nostradamus, street corner revivalists, and modern Mayan prophets have become only so much background noise against the still rising sun.

After all, here we are, burgeoning seven billion – and our world still turns, humanity with it.

Yet, despite our relative species success, at this stage in our brief history we face greater disruption and uncertainty than perhaps at any other time. The changes that have occurred in the modern era alone – from the rise of the Industrial Revolution through to the Digital Age – mark a period of unprecedented transformation. Silicon chip-based technologies are now advancing at an exponential rate[1], creating a progressive leap the human mind has not yet evolved to intuit or understand. A tremendous evolutionary pressure is mounting in the form of technological expression. Its full emergence may generate a revolution that will topple many centuries-old structures of consciousness and ways of life. To alter these structures is not merely to change history, but to change our very selves. And yet, there can be no doubt: our world requires new structures, new systems – new and awakened consciousness.

With exploding growth, we face troubling concerns: planetary climate change; income inequality and the growing number of the world's poor; water crises; famine; inadequate nutrition; gender disparity; disease; homelessness; human trafficking – and these are just some of our world's systemic or "wicked" problems, growing quickly and ever more complex.

While the booming growth of technology creates many questions and some very troubling concerns – its dazzling potential may offer humankind real possibilities for meeting complexity, empowering us to solve many of our world's most troubling "grand challenges," perhaps within the next decade. Scientific breakthroughs are emerging at warp speed and rapid growth in tech brings with it profound capacity for

enhanced connectivity and deepened civic engagement. Social media allows strangers to communicate in ways not dreamed of only a short time ago. Collective consciousness is no longer a remote concept left to analysts and other fans of Jung, but is a graspable notion for all connected via Twitter, Instagram, or Facebook. Connection over distributed networks, the linking of servers and systems and the relay of massive amounts of memory and information shared in discreet packets zooming at light speed, offers a worthy analogue for a global brain. As we leap into the next sphere of consciousness along an evolutionary trajectory, we recognize that leap as exponential; we are going systems-scale.

Exciting implications aside, there are, no doubt, critical consequences for any technology bereft of humanity; of any brain disconnected from *heart*. But in our time, wisdom that emerged millennia ago in the East – from the Hindu Kush to the Himalayas – has travelled oceans. Mindfulness is sweeping Silicon Valley and leadership conferences in every city, even appearing on the cover of *Time Magazine*. But as more mystery is unveiled and explained, still more human shadows emerge. Perhaps the greatest question of our time is not whether we will achieve the scientific, technological, and consciousness breakthroughs that might allow us to solve systemic world problems and usher in one thousand years of peace and abundance, but whether we are prepared, individually and collectively, to embrace deeper, wider spans of self- and other-awareness; to incorporate a new global ethics and deepened sense of collective integrity; and begin, finally, to integrate the painful cultural shadows we feel rising to the surface all over the world, asking to be acknowledged and healed.

These are fundamental stones in the path to a cultural awakening, and we are invited to walk them together – to marry our individual practices to a collective spiritual dialogue.

A JOURNEY INTO THE DEEP STRUCTURES OF CONSCIOUSNESS

MOVEMENT AND STILLNESS

Our world's ancient wisdom traditions speak of two distinct principles of energy or consciousness: stillness and movement. Their motion is the combustion engine of the great spiralling wheel of ever-present change called life, and understanding their nature is vital in the enlightenment process. Everything we perceive as fixed in space and time is actually *movement* – forms of energy, constantly changing. Too often, we fall prey to the notion that our circumstances, the people in our lives, or some aspect of ourselves are fixed and permanent. Yet, our perceptions themselves are forms of movement, elements of flux in a universe of flux.

Consciousness itself is change because it is constantly evolving – or appearing to devolve – and we with it. Movement contemplates movement.

Areas of stagnation in our lives create a sense of separation, however unconscious. Lack of movement may surface as a feeling of stuckness, appearing as financial difficulty, illness, or relationship struggles. Where there is adequate movement, we tend to experience effortless joy and health. Flow states – whether in sports, the arts, or sciences – occur when the energy of consciousness moves through and awakens us. In flow, we enter heightened states of awakening and may achieve profound breakthroughs. Movement liberates us.

Paradoxically, we belong to great stillness – the other side of the mystical coin of change.

Beyond the mystical understanding that all is movement dawns the realization that consciousness, too, is stillness, presence, silence, nothingness, *isness*. Engaged in practices of cultural mysticism – insight mediation, embodied awareness, or in pure moments of bliss or revelation – we enhance a capacity to drop into the depths of pure silence, to feel the full-empty of its embrace. In such moments of quiet clarity, we see that we are not the structures we are bound to and identified with during ordinary waking consciousness. Rather, we contain and are contained by a quality of deep space – presence – timelessness: some immense property of stillness belonging to the ineffable.

And while we are busy mentally separating these principles into dualities, the greater truth is that stillness and movement are one; they are the nature of consciousness itself. As we reach into this awareness, we arrive at a yet another mystical truth: the *word* and the energy it embodies are not two, but one. Full congruency between *logos* and its meaning, or "divine reason[2]," must exist before truth can. Put another way, truth cannot be understood through intellectual understanding alone; we must know it with embodied wisdom. We must live it. We must begin to walk our talk.

Standing in a gallery, investigating a strange new work of art, whatever the observer notices says as much about her as it does about the painting itself. In this way, all art, in so far as it is observed, is a work of co-creation. We have evolved into awareness in a universe which reads as a great tome, and we, its co-authors. We, the trillion, fractal co-architects of the experience of consciousness have come to write-live-be our stories, experientially.

A sign of the times: our narratives, once linear, are now powerfully multi-dimensional.

While in latency, we remain unaware of ourselves as co-creators. For long periods, we perceive ourselves solely as narrator, subject, or object. The unformed ability to recognize our innate powers of authorship frequently generates an obsession with the past, as well as an anxiety about the future. We often become fixated, reading and rereading yesterday's newspaper, fretting often and much over karmic material acquired ten minutes or twenty years ago. From this vantage, space-time is restricted: flattened, fixed, linear. The very beingness we inhabit feels equally compressed, as our self-sense has not yet grown whole and rounded.

Here, we experience a kind of flatlander-*itis*[3], a limitation of both self-sense and worldview. A common collective fiction based in these earlier realms of awareness is that humans are temporal beings who live *on* a planet. Yet, the water, carbon, and carbohydrates of our bodies *are* our planet. Indeed, human beings are Earth the same way we are the microbial fauna we carry. We are the trillions of symbiotic microorganisms existing in delicate balance on our skin and hair and in our gut, all necessary to life and health. In earlier stages, we fail to recognize interdependencies and instead believe entirely the story of material reduction and separateness – for instance, that bacteria and other microorganisms are harmful and best sterilized from our bodies and environment. (In even earlier stages, we are altogether unaware of their existence.) But as we evolve in consciousness, we grow in relatedness to all that is, to all we are.

We come to understand we are planetariums; our bodies contain, and are contained by, ecosystems.

Awakening is a process of unfolding relatedness between the external and exponentially nested systems which birthed us – from ancestor to planet to solar system to galaxy, and all that lies beyond – with their corresponding interior landscapes, mirrored perfectly in the still waters of self. As above, so below. The act of becoming conscious of our interior architectures marks a tremendous leap forward; it is a catalyst of evolution and its revelations make mystics of us all.

We find we are systems within systems, wholes within wholes. Just as every particle is also wave, every human is both substance and spirit. We are the emergence of qualities of consciousness on terra firma. We are its thrust and its yearning; its nascence and its soulfulness; its unformed and its pioneering vanguard. We are its seeking writ in stardust.

TOWARD A MODERN UNDERSTANDING OF KARMA

We might think of the Eastern word *karma* as an item of carry-on luggage, a suitcase we find ourselves forced to heft between planes during a busy airport layover.

Consider the most recent conflict or difficult conversation you experienced with a friend, colleague, or lover. In our contemporary understanding, karma is the mix of distracting thoughts and heavy energies you carried with you after that conflict as you attempted to go through the rest of your day. With little opportunity to digest the emotions it brought up for you, you held on to this material and it remained unprocessed for a period of time. You carried these energies like so much luggage in the form of bodily sensations, difficult emotions, and distracting thoughts – for ten minutes, the remainder of your afternoon, weeks, or possibly far longer. While you attempted to tend to other matters, a vital percentage of your processing power was taken up with an experience from the past.

Any difficult, undigested, and unresolved energy that takes up precious resources in our minds and bodies is karma.

Karma is not about blame or punishment or retribution. What it may be instead is a design requirement for any sufficiently complex system of consciousness. Karma allows for the metabolizing of residual energies, so the primary cycle of stillness and movement, of rest and flow, can seek and fulfil a system's homeostasis. As we are busy attempting to process unresolved energy from a past "negative" or conflict experience, thoughts and feelings will resurface, disrupting our flow. These energies block us from being fully attuned with others, or fully accessible to our work and lives.

If the scale of conflict we encounter is ongoing and chronically stressful – whether it is domestic violence or gang violence, personal assault or world war – it will become very difficult for us to metabolize in order to find the appropriate rhythm between flow and stillness required for our progress and self-actualization. A person born into a high conflict zone – an area of high violence, crime, or poverty; a war-torn nation; or a community whose ancestors death with deep oppressions and pain – will likely have little direct causal understanding of the origins of the symptoms they carry: inability to achieve presence or mindfulness. Here, the scale has dramatically increased though the principle is still karmic; it is only that it far supersedes the story of the individual. In cases of childhood suffering, war, and global atrocities, our karma has become collective. In the contemporary lexicon, we file such stories of debilitating suffering under the heading: "trauma."

RECOGNITION OF THE EFFECTS OF TRANSGENERATIONAL TRAUMA

Trauma is used to describe the inner regulation system of any mammal going through a potentially life-threatening experience. In response to a threat, or perceived threat, our nervous systems engage ancient, evolutionary mechanisms in rapid-fire succession. Fight, flight, and freeze are automatic functions; they happen so quickly, we need not deliberate over which is correct. Indeed, we cannot; there is rarely enough time to process both the danger, and how we intend to face it, which is almost certainly why evolution has pre-programmed certain functions.

When an individual experiences trauma, s/he must be given the time and resources to adequately and appropriately work through its content. If these are not provided, the trauma is likely to remain as unprocessed energy in the system long-term and will have a further affect not just on the individual, but the collective. Any experience that is larger than our current capacity to process will be postponed, frozen, and stored somewhere in our nervous systems, waiting for its time to be processed and released. If this release does not come, the effects of trauma may create illness, dysfunction, or disability[4].

Trauma forces intolerable levels of fear to surface. If we cannot bear to confront our fear, we may select to avoid it through patterns of disconnection, dislocation, or disassociation – i.e., by dampening and disabling functions of consciousness. In this way, the psyches of traumatized individuals are frequently fragmented, for longer periods of time. A culture of traumatized persons is a storehouse of unresolved conflict, unacknowledged suffering held in shadow and projected in the landscape – onto others and onto circumstances, creating further retraumatizations. These are the fixtures and alleyways in the realms of the collective unconscious, and they frequently surface as intense feelings xenophobia, racism, sexism, homophobia, transphobia, and other cultural hostilities and toxins.

We can see the effects of similar shadows illustrated in the discussion of global climate change. The fear of and failure to meet this oncoming change rationally creates collective shadows, the opposite of resilience. Despite growing scientific evidence for the existence of climate change, we refuse to move forward, remaining entrenched in denial by greed and apathy, refusing to collaborate, refusing to do what must be done to save our world and ourselves. As the planet revolts, we become forced to react, but continue to refuse to do so rationally. We choose instead to meet change from our collective shadow: with violence, hatred of foreigners, psychosis, isolation, distancing, resistance, and nonparticipation.

In studies of transgenerational trauma, researchers are discovering that second and third generations – the children and grandchildren of Holocaust survivors, for instance – carry the greater burden of the collective trauma from their ancestors[5]. Second and third generations are believed to experience less resilience to stress, and may be more likely to experience post-traumatic stress disorders, depression, and anxiety in times of difficulty. Every human carries a piece of our ancestral karma – the unresolved and unintegrated material carried over from the previous generation – as physical, emotional, and psycho-spiritual imprint. Further, the individual shadows we carry sync with those carried by others around us as unconscious energies attract and build coherence. In this way, we draft unconscious cultural agreements, laying them beneath the subfloor of our social architecture.

While symptoms indicating the existence of trauma may appear in the lives of individuals – difficulty regulating emotions, inability coping with challenges, or manifestations we call depression, anxiety, and even personality or mood disorders – in truth, they arise out of the collective unconscious, a shared but hidden culture of suffering we have collectively denied, suppressed, and split away. These cultural agreements emerge as information networked through our individual nervous systems and coded as "normal reality." In this way, an integral part of our cultural matrix is built upon denied suffering, which we take as "just the way things are." From this place of deep shadow, we often fail to recognize truth or to meet change with resilience.

Any large-scale catastrophe acts as a barometer, a visible gauge by which we can measure our collective resilience – as well as to discern the degree and nature of our weakness. Europe's recent refugee crisis served the collective by exposing those areas most in need of our attention: for healing and integration.

The refugee crisis came over the continent as an intense shock, revealing widespread resistance, difficulty, and, in many places, an outright unwillingness to accept refugees themselves – men, women, and children, the victims of war and other crises. Where they could, many communities inside these countries opened their homes to refugees, but the governments of the nations involved remained largely intractable. They are many of the wealthiest countries in the world, yet the inadequate response and lack of partnership combined with xenophobia and hatred elicited by the faces waiting at their borders was a dark indicator that even our most advanced countries are not yet ready to serve as official partners with evolution.

Still, at least a couple of European Union nations stood up against the disillusionment to greet the spill-over of international faces with assist and support. Rather than growing more rigid and resistant, their social and institutional structures attempted to become pliable as this new energy flowed through them. Although these nations represent a small minority, they are our leading-edge, pointing boldly to a world to come.

Collaboration, participation, global social witnessing, and planetary citizenship are essential values for the era we enter. We can no longer wait for current structures and governments – too often burdened by bureaucracy or corruption to move swiftly and ethically – in order to take action. So, we must act. We must grow together into a new version of ourselves.

Whatever has been blocked, denied, or suppressed in the experience of one generation is simply energy or information – a modulated wave – that can neither be created nor destroyed; it must fulfil its movement. We might envision the impact of collective trauma, such as that created by the Holocaust, as a series of scars etched into the tissue of our shared humanity. Succeeding generations will enter the world bearing those scars, and it will be their task to integrate the psychological impact of whatever traumas created them.

Over the better part of the last fifteen years, I have worked with small and large groups, facilitating the integration of shadow content, i.e., the healing of collective traumas. Wherever people come together to heal the unconscious, I have observed a consistent energetic process. The initial stage of any group process reveals energies of denial and resistance. A later element of the pattern emerges as a mass eruption of intense energies – where many people in the group may begin to weep or experience other deep emotions together. Some groups may experience collective visions or ancestral memories together and these are profound emotional experiences of unburdening and release.

While working with large groups in Germany and Israel, both of which are the inheritors of significant collective trauma, I observed deep openings into shared unconscious pain. For all who were able to remain with the process, dropping into the flow of suppressed material held in the dark lake of the unconscious, real change occurred. A few in the room were unable to bear the process for a period of time, and required the attention of one-on-one counsellors. Such work demands a sophisticated process and conscious facilitation, as well as time carved out for support during the integration of group shadows.

THE DEVELOPMENTAL, EVOLUTIONARY MATRIX OF CONSCIOUSNESS

The evolutionary impulse of consciousness to awaken is both a vertical drive – linking upwards through the centuries in each successive ancestral generation, arriving finally in the present moment in the form of *you* – while simultaneously emerging or "descending" from the potential realm of the future, emitting its vibrational light, its alive intelligence, also into the present, and once again, as *you*. Concurrently, this evolutionary impulse expresses itself as a horizontal or lateral drive, surfacing as interpersonal and transpersonal fields of relating, connecting between and across the social fields of a single generation – weaving its weft and warp along the tapestry of generational community, culture, and nation, culminating as the fabric of planetary consciousness.

The axes of these vertical and horizontal drives meet, forming a matrix out of which developmental, evolutionary consciousness weaves its *I* and *We*, its *You* and *Its*, its interior and exterior domains[6]. Indra's net.

Through the reconciliation of karmic or traumatic wounds, we grow able to establish healthy relations, bonding in attunement with one another so that the field of social resonance, of pure and essential presence, is restored. This is the awakening of self-to-other, of *love*.

EMERGENT COMPETENCIES REQUIRED IN THE PROCESS OF GLOBAL AWAKENING

At higher stages of conscious awakening, we arrive at *we-space*, a palpable and awakened sense of intersubjectivity. In we-space, new competencies – new capacities of consciousness – become accessible, even required, for expanded stages of our cultural evolution to emerge. One important competency unfolds as the capacity to embrace change. At a time of tremendous disruption, developing this skill is a foremost priority. Without it, change will forever be something that happens *to* us. We will fail to come online as co-authors and will forever be the victims of circumstance. Another competency of we-space is innovation. True innovation requires resonance between multiple minds with the resources of their environment. The ability to service collective trauma is another important capacity emerging at higher stages of awakening.

We-space exists as a wave field, one we can visualize as a watershed, a living container for both sources and flows of energy, feeding into and returning out of the collective energy body. The ability to synchronize to a coherent field is a distinctly *We* ability, and is greatly needed at this time in human history. As our

centre of gravity comes to rest in higher stages of evolutionary development, this field becomes a space we can "look" into – still another competency. Before we achieve this stage, we are too fragmented to perceive the conditions of the social field or to discern its impact on the self or the whole. We struggle to feel into others and to recognize our own feelings and motivations clearly. In this way, awakening is an act of coming into wholeness, of defragmentation and integration. We arrive at higher stages of consciousness with a deepened self-sense and clarified depth perception. "Seeing" becomes something we do as much with our hearts and minds as with our eyes.

What we discover through this process of awakening, as well as during peak moments or heightened states of consciousness, is that the matrix of consciousness – parts both awakened and in shadow – is nothing less than the invisible organizing principle of all life. This field calls to us as the impulse of evolution, as the voice of the Divine. Our own nervous systems contain a perfect blueprint of this primary structure, and are connected directly into that greater field. In our bodies, we find the conditions for both exquisite coherence and connection, as well as for unfathomable pain and separation. Both are great mysteries, unravelling themselves to us in their own time in the process of awakening.

Wherever we find ourselves lacking sufficient coherence with the field, out of alignment with our Source, our bodies, minds, and cultures will suffer. Lack of coherence creates blockage, disintegration, and devolution. Starved for coherence and lacking adequate integration, evolution eventually stalls and cannot proceed. We may drop into lower levels of consciousness until we discover the nascent thrust forward once again.

GLOBAL SOCIAL WITNESSING

In meditation, we practice unhooking consciousness from the object of awareness. Through practice, we discover the inner witness, that which is not arising as our thoughts or sensations, but exists in the still silence beneath – a silent, non-judging observer.

Recognition of this deep inner witness brings peace and balance. By nurturing our capacity to hold witness, we lend support to areas such as emotional regulation and stress tolerance. In this way, holding witness perspective has the effect of deepening conscious awakening.

Out of this imbedded awareness emerges another competency of consciousness, an ableness of our time we might call *social global witnessing*, perhaps best understood as a mixture of contemplative precensing[7] and active attunement. Rooted in solo contemplative practice, the seeds of this capacity in consciousness branch out, flowering as a necessary and collaborative function of the collective.

As social global witnesses, we hold active presence and engaged awareness of our world, observing all that arises around us while simultaneously observing all that arises within us. We remain aware of our internal responses to our exterior world, whether our response is resistance, shutting down, or even a sense of going numb. As attuned social global witnesses, we create an expanded interior space from which we begin to recognize the self-sense of the collective.

An appropriate motto for the attuned global witness might be: "As I witness the collective, I witness myself," or conversely, "as I witness myself; I witness the collective."

Our modern devices contain immense computing power, more than the entire Allied forces possessed during World War II[8]. With a few taps of a screen, in fact, we can reach loved ones, friends, and colleagues half-a-world away. Small enough to carry in a pocket, we can access whatever is happening anywhere in the world, as it's happening. But much of what we label "news" is much more than current events. Popular, often corporate-owned, news outlets frequently sell fear-inducing, ratings-focused content – an assault on body and brain. Given the nature of the collective trauma we inherit, this material serves as a mirror to all we carry. Depending on how we choose to relate to it, it either shapes our views of the world and one another, further generating fear and toxicity, or denial and numbness, or it points the way toward needed integration and healing. The choice is ours.

If given too much space in our lives, negative news media can make it further difficult to engage the present as connected witnesses. Rather than fostering empathy for those suffering as a result of the atrocities we read and hear about worldwide, certain forms, like 24-hour TV news, may only serve to disconnect us. Here, our collective shadows emerge in polarizing and dehumanizing ways – but the light we carry invites us to recognize these expressions as the call to heal our wounds, rather than to project, deny, or identify from them.

The paradoxical truth is that, to be global witnesses, we must remain conscious of current events in our communities and in the world, but we must learn to do so with all capacities online – where no part of us has checked out or become dysregulated. This is no small task. Refusing to sink to hysteria, polarization, or cynicism requires conscious vigilance. It asks that we attend our world's pain with thinking minds and feeling hearts. To serve in presence as true

global witnesses, we must be willing to consciously feel and accept all that has been split off, dislocated, and denied. We must choose to be present witnesses for pain, for terror, and for trauma. We must be willing to consistently and consciously resolve those energies that have been left stored and undigested. In essence, we must open the carry-on baggage of our world, sort its contents, unpack.

Whatever trauma I carry belongs to the collective shadow and acts as a filter, preventing me from seeing the world, from witnessing clearly. Discovering this elemental truth, I learn the importance of clarifying my past and find that my own integration becomes an act of service.

MULTI-PERCEPTIVITY

The next evolutionary competency we meet is that of multi-perceptivity, the capacity for holding contradiction, paradoxes, without rejection or confusion. As we begin to master new, evolutionary capacities in collective awakening, we begin to desire solutions to our world's most intractable problems, recognizing these are the responsibility of all. We do so while allowing the space that hosts them to become alchemistic ground for transmutation and innovation to appear.

Becoming a conscious participant in global awakening is one of the noblest human endeavours we may undertake; it is the beginning of true caring, love, compassion, and inclusion. Whatever has been externalized, projected, suppressed, or denied can find a home within – embraced with acceptance.

GLOBAL CITIZENSHIP

To grow in further consciousness, we will be required to face the pain we as a species have inflicted upon other beings, upon ourselves, and upon our planet – suffering we are still very much inflicting. We are called to develop deep planetary empathy. If we refuse this much-needed evolutionary upgrade, we will remain locked at our current level of consciousness, dooming ourselves, and almost certainly, untold other species. This transformation is an evolutionary imperative. We can observe the consequences of delaying this call in the repetition of many of our destructive patterns, those negative cycles of "news" and history – conflict and war and destruction – as well as the personal cycles of conflict all too often repeated in the lives of those with unprocessed trauma.

Therapeutic psychotherapy and other healing modalities offer valuable tools to individuals for the restoration of traumatic wounds, liberating sufferers from patterns of retraumatization, initiating lives of greater choice and freedom. We must awaken to the degree of pain and unprocessed energy we carry. Its gravity slows down our evolution, stalling out the developmental process. By holding onto unresolved and unprocessed energies – past traumas and conflicts we dare not face – we doom humanity's children and grandchildren to carry this trauma for us.

> The contents of one generation's collective unconscious is a hidden field of suppressed shadows the children of the next generation must be born into and forced to carry forward. This makes it a moral imperative that we reclaim these disavowed elements of self in our own lifetimes. Once we have done the work to excavate, heal, and integrate these lost fragments of self, they seek transcendence. We do not lose them, as an atom does not lose its quarks on its journey to become molecule, nor does a molecule lose its atoms as it becomes cell. It is only through the process of reclamation of cultural shadow, in the integration of collective trauma, that we become a sentient whole, able to make the world anew, together.

Just as a species acquires marvellous and often surprising physical adaptations, permitting it to survive even harsh or sudden changes to its environment, evolution offers adaptive upgrades in consciousness at every turn. Inherent to this is arecognition that through conscious application, we may advance our own evolution as a matter of intention, desire, will, and practice. While the denser physical domain progresses relatively slowly, consciousness is unbounded. Through skilful practice, we may work to achieve mastery of our inborn ability to evolve. Through mindfulness, intention, precensing, attunement, collective dialogue, and other consciousness practices, we accelerate our path forward.

Here, the old is seen and made new, and the new is born. The liminal is the temple of birth-and-death where traumas are reconciled, the past released, self-structures both included and transcended, and the glittering, eternal present handwrites invitations to the field of future potential.

DEVOTION AND SACRED LAW AS FUNDAMENTAL TOOLS OF AWAKENING

In embodiment spirituality, we discuss two levels of practice asking to be combined. These are state practice and process practice. State practice, the process of seeking higher states of consciousness, may be reached through a strong contemplative practice: meditation, contemplation, prayer. During contemplative practice, sudden moments of awakening, or

state experiences, may occur for anyone at any stage of consciousness. A Buddhist's peak state and an evangelical Christian's will come in distinctly different flavours, but the numinous speaks to all.

As we progress along a path toward higher awareness, many of us begin popping in and out of higher states until we begin to establish a more permanent realization. At the same time, we may work to restore our relationship to life through what is referred to as process practice, a deeply relational spiritual training. Process practice is the restoration of all our relations through a deep practice of compassion, love, and illumination of the body-mind. Through process practice, we walk our talk, manifesting spirit and intelligence through a fully embodied relationship with our lives and all that we encounter. Process practice is done in the world, wherever we are. It does not ask that we depart from ordinary living to mediate or pray in a desert or ashram; it asks instead that we become cultural practitioners – to learn to use embodied awareness as a marriage bed for the transcendent and the immanent, the sacred and the secular.

It is through a combination of the contemplative state practice and a cultural yet mystical process practice that we become midwives in the awakening of our social agreements and their underlying architecture. This work inherently deepens and widens the interior space for self and all.

We live in a time that is a great challenge to full embodiment. An inheritance of multigenerational trauma combined with the nature of our postmodern lifestyles has severed the intellectual self from our physical and emotional bodies, dramatically limiting opportunity for much-needed integration. Since around the time of the Enlightenment, the rational intellect has been promoted as worthier and vastly more important than feeling, creative, and even spiritual pursuits. As a result, have been urged into compartmentalization and our rational minds have lifted off from our bodies, the home of emotion, memory, empathy, and creative awareness. This "helicopter mind" urges decisions that exclude the heart and the body, revealing why we have so removed ourselves from nature. An embodiment practice, more important now than ever, synchronizes all parts of the central nervous system and permits the realignment of the whole self. Embodiment is an urgent aspect of awakening, and is needed by all individuals, institutions, and organizations.

Devotion is generally a difficult concept for the scientifically informed, postmodern consciousness. After all, we abandoned the grip of repressive religion for greater intellectual autonomy. But what began as a departure from regressive forms of faith soon leaves us stuck, itching from allergies to anything identified as "sacred." We become doomed to meaninglessness, trapped in a cynicism that initially felt empowering, but has left us only with despair. In search of relief, we consume and abuse the entertainments marketed by capitalists, seeking shelter in hyper-individualism, but find only further fragmentation. We have lost our childlike wonder, sense of humility, and any reverence for connection. Too often, we suffer from the loss of a calming sense of illumination, that inner glow of Spirit, or anything more luminous than the incandescence of a cell phone screen.

And so, we long for technology to drive us to the brink of what we know, to usher a mechanical singularity that might offer a new sense of transcendence. Or, perhaps, destroy everything that is human.

THE LAW OF THE DIVINE IS SIMPLY THIS: *LOVE*.

Law should not be perceived as a rule or structure but as a longing for the deepest love affair with life. Sacred law is the way home. It is living in full synchronization with Source. It is the suspension of time, space, and separation. Law is holy communion.

Living in accordance with higher Law is to live in accordance with sacred ethics, with the essential flow and stillness. Divine laws are cosmic meridians, holding the web of life in the most coherent light and creative power of which our souls are a holographic projection.

When law must be enforced from the outside, we have lost our natural understanding and companionship with its divinity, and with our own. We live in a world of excessive regulation, litigiousness, and legal encumbrance because the sacred nature of Law, an inherent right of consciousness, has yet to be fulfilled in the collective through the act of awakening, and so law has been heavily externalized in many unjust and legalistic forms. Lower consciousness seeks to enact law through authoritarianism, using suppressive and restrictive functions to disempower the many while empowering only the few. This has led to widespread rejection of the notion that living according to higher Law could offer freedom, but it is a fundamental truth: divine law is the path to sovereignty.

CONCLUSION

What would it look like if our shared narrative were one of ascent – where, we, the mythic hero, having accepted a bit of divine guidance or inspiration,

chose to find our way out of the underworld, to rise from Abyss into Grace?

What would it feel like if we abandoned our great slumber and chose, instead, awakening?

Our past is not yesterday, but all of the stored and unresolved energies we hold, unseeing, consuming our capacity to remain fully present and awake. In the same way, our future is not tomorrow. It is an ever-present state of higher consciousness we are growing into now and now and now. The future is the potential of all resonant possibilities vibrating into being.

When we find ourselves attuned and enraptured in states of pure and essential flow – by inspiration, innovation, or genius – we are participating in the *effects* of the future. We are co-creating with the pure impulse of the evolutionary force. In such moments, we glimpse a taste of all we are becoming and all that we are. By choosing to resolve the karmic/traumatic energies we carry, our shared future becomes vibrant with innovation and creativity; it becomes a location of healing where the light can pour through. In this light, we emerge as radically, exponentially whole.

Should we access such a future, the marketplace will shine with the presence of G-d, and we will know the sacred has returned. Science will meet mysticism in a marriage of souls. Medicine will remember the body's holy origins. All of this will be possible because we will have begun the work of excavating our shadows, making conscious every energy that has been held in the dark of the deep *unawake*. The result of our co-excavating will find us in a new state of deep communion and ever-present co-relating.

♦

[1] Berman, 2017. "*Technology Feels Like It's Accelerating.*"

[2] Logos, 2017. *Encyclopedia of Britannica Online.*

[3] Abbott, E, 2017. *Flatland.*

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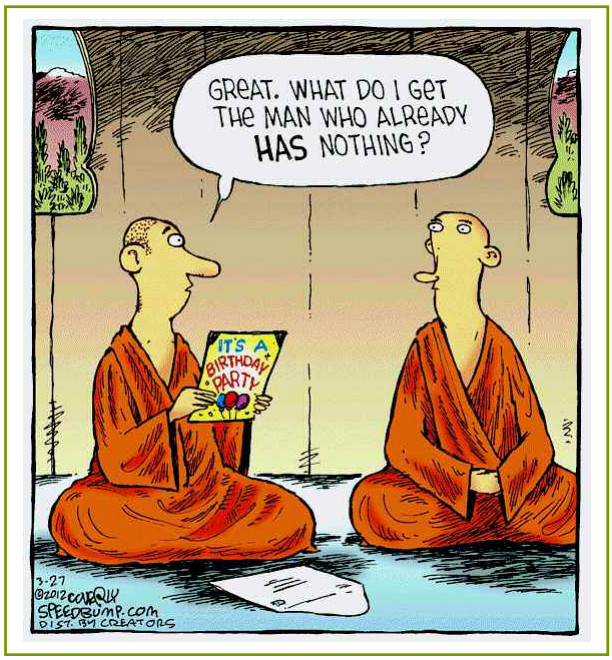

Enlightenment will be the beginning, not the end;
beginning of a non-ending process in all dimensions of richness.

Osho

Enlightenment is not the creation of a new state of consciousness,
but the recognition of what already is.

Allan Watts

You are not a drop in the ocean,
you are an ocean in a drop.

Rumi

⊙ ♦ ⊙

MICHEL BAUWENS ~ EDWARD BERGE

COLLECTIVE ENLIGHTENMENT
THROUGH POSTMETAPHYSICAL EYES

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INTEGRAL POSTMETAPHYSICAL SPIRITUALITY FORUM

MUCH OF WHAT FOLLOWS HAS BEEN EXPLORED in the Integral Postmetaphysical Spirituality forum founded by Bruce Alderman. The original iteration at Gaia has since gone extinct. The forum originally started as an exploration of Ken Wilber's book *Integral Spirituality* (2007), but has since expanded to include many other sources and ideas. The forum's description follows, with the subtitle: Participatory Spirituality for the 21st Century.

"What paths lie ahead for religion and spirituality in the 21st Century? How might the insights of modernity and post-modernity impact and inform humanity's ancient wisdom traditions? How are we to enact, together, new spiritual visions – independently, or within our respective traditions – that can respond adequately to the challenges of our times?"

To briefly define the terms used in the forum title, 'integral' is the general term originally used to refer to Wilber's integral theory, or the integration of body, mind, soul and spirit in self, nature and culture. The idea is that there are increasing levels of progressive development within all those domains, and to explore how those domains interrelate. Metaphysics generally refers to the exploration of reality. 'Postmetaphysics' then is a kind of metaphysics but without some of the assumptions and premises traditionally associated with that study. Those include the notion that humanity can accurately perceive reality as such either through some meditative state of consciousness, and/or through the notion of pure Platonic forms via abstract, a priori reason. The postmetaphysical turn in philosophy (see Habermas below)[1] instead grounds metaphysics in the empirical study of intersubjective cultural communication and (see Thompson below) second generation cognitive science which sees the topic as embodied, enacted, embedded and extended is all domains. Wilber also explores this in the referenced book. All the above is then applied to the domain of spirituality, which also evolves through these developmental changes.

So how then does spirituality express postmetaphysically? First of all it is no longer a domain diametrically opposed to the material domain. Another hallmark of metaphysical thinking is this opposition, with the spiritual or absolute domain the source and cause of the material or relative domain. Postmetaphysical spirituality acknowledges the virtual realm, akin to the absolute realm, but in a very different relationship with the actual or material domain. The virtual domain is still generative of the actual, but its own genesis lies not in a metaphysical plane but within its relationship to the actual in a co-generative process.

Alderman (2013) discussed this process via the emerging field of Object-Oriented Ontology (OOO). A number of metaphysical systems, both east and west, saw the absolute realm as a primal whole underlying the relative realm, or fundamental element(s) from which the rest of the material realm was constructed. However OOO equally opposes an overlying process relationship between all things, that objects can only be understood in their relationship to each other. The idea of an object's substance is reconfigured avoiding either of those extremes that express more generally as 'the myth of the given.' More specifically, e.g., it expresses as the reduction of reality to our direct access to it *in toto* like the metaphysical notions of eastern meditative traditions, or our direct access to reality via representational models of reason typical of western empirical traditions.

Instead OOO offers a way out of this dichotomy in its notion of the withdrawn. This is the hidden or virtual excess beyond what enters the actual or relative plane, and which cannot be directly accessed but only speculatively inferred. Alderman referenced Bryant (2011a), so to Bryant we turn for a fuller description of the withdrawn using Derrida's notion of *différance*. An object's virtual substance is withdrawn, yet it is not metaphysically opposed to temporality and process; to the contrary it is embedded in it. Therefore even the virtual is immanent, not transcendent[2]. *Différance* has two aspects: the difference between objects and the deferral of presence, that withdrawn potential within an object. But even within the difference between objects there is a hidden, withdrawn reserve so that said objects never experience the withdrawn substance of another. Such relational differences occur with specific contexts, and in different contexts their withdrawn reserves could manifest differently.

So *différance* simultaneously exists in the manifest realm, yet is also absent in the potential virtual realm. Hence it is an entirely different way of looking at the relationship between apparent opposition, one where these domains are distinct yet inseparable. And in the process the withdrawn virtual can be loosely ascribed to the spiritual domain and the actual domain to the manifest. And yet that framing also still clings to a metaphysical dichotomy, for the virtual and the actual co-exist and co-influence each other. In that sense the spiritual is embodied, and the body is spiritualized.

Variations on this theme are seen in many other postmetaphysical paths explored in the forum, a few of which are below, even they don't explicitly frame it in the above terms. Enlightenment is thereby redefined from this perspective which expresses in multiple ways and forms through participatory collaboration. It is one that keeps in mind that no matter the existing circumstances, there is hope that we can improve them by keeping in mind, body, soul and spirit the virtual and withdrawn excess that feeds us both from between and within. Therein lies an opportunity for an ever evolving collective enlightenment that incorporates the same/differences between eastern and western traditions.

EASTERN AND WESTERN FORMS OF ENLIGHTENMENT

Granted there are both meditative or contemplative practices in the western approach, as well as rational investigation and debate in the eastern approach. However it is still useful to generally distinguish the 'eastern' and 'western' understandings of Enlightenment, which are complementary and both equally necessary.

The eastern approach, broadly derived from the Hindu-Buddhist traditions that developed in South and East Asia, is one that highlights meditative states of consciousness. Meditation in the traditional sense is an individual practice of sitting quietly and still, by either concentrating on a single object or by allowing any thought or feeling to arise and then letting it go. In either case the goal is to arrive at a meta-awareness of our very awareness process, thereby disidentifying with any particular object of awareness. Such disidentification promotes a more open and responsive attitude to others, as well as initiating within an individual a more compassionate embrace of oneself. It also exposes one to their own prejudices and recalcitrant, limiting views that obstruct connection with reality as such. The more one becomes practiced in such meditation the more one resides in this connection and the less one identifies with a selfish ego that clings to its defensive positions. Such states are significant part of what they describe as enlightenment.

The western approach, highlighted by the 'Age of Enlightenment,' is one of deepening our capacity for abstract reason and is also essentially an individual capacity based on the recognition of personhood. The human capacity uses reason in order to see the world as it is by liberating us from superstitions, illusions, collective beliefs, and so forth. In some ways it was a dream for disembodiment, that humans were able to detach themselves from the world, looking at it objectively from the outside. Western approaches are largely those that believe the world and its phenomena are real and can be directly known through a priori reason. Collective processes have been set up

and organized, such as the scientific method, that are accepted to shed an accurate light on objective phenomena as they are.

The goal is to integrate both approaches within a postmetaphysical frame. Within that frame it is generally accepted that humans cannot detach themselves from physical and social realities, that we are all deeply embedded in fields of language, power, individual and collective emotions, and various filters that are simply unavoidable. Some authors, like George Lakoff (1999), have specialized in analyzing the frames and lenses through which we look at reality and argued that the metaphysical premises of the Age of Enlightenment were misleading at best.

RECONTEXTUALIZING EASTERN ENLIGHTENMENT

What have recent neuro-scientific studies revealed about this purportedly individual practice and experience of reality as such? And what are the implications for collective enlightenment? It calls for the recontextualization of traditional interpretations of such states by understanding how they are generated and placing them within a postmetaphysical context.

Thompson (2015) comments on how Advaita sees meta-awareness as one that transcends the world of manifestation by directly perceiving the absolute. But Thompson sees such a state as an embodied, pre-personal base state of consciousness, recontextualizing the traditional metaphysical explanation into a "contemporary naturalist conception of the embodied mind."

What is being accessed is a baseline attention that is fully embodied and thereby limited by that embodied constraint. Such a consciousness without an object doesn't lay claim to access to *the* reality of All, or even access to all of our personal cognitive unconscious or collective unconscious. It's just accessing that embodied part of our natural awareness available to us by virtue of having the body and brain we do with all its limitations.

But Thompson (2015b) goes much further than this state being embodied within an individual. Additionally it is embedded, enactive and extended (4E) within a community. Heretofore the mindfulness state (meta-awareness) has been treated by neuroscientific research as an individual affair generated and contained in the brain. While the individual brain indeed is a necessary prerequisite, it is only a part of how such states are generated. The other parts are the broader context in which this phenomenon occurs.

> Cognition requires the entire body as a whole, not just the brain. E.g. motor activity is directed involved in how one perceives an object. Gesture is integral to the speaking and thought process. Cognition is also embedded in the body-brain-environment interaction. Meta-awareness is an extended form of internalized social cognition and dependent upon such shared attention. Memory is also extended within one's culture. These elements enact or bring forth a shared world of meaning. Hence mindfulness states as part of the Enlightenment process are a social practice, i.e., it is a collective Enlightenment[3].
>
> Lutz et al. (2007) explore the various senses of self involved in the meditative process. The meditative state is described as bare awareness without an object, a "minimal subjective sense of 'I-ness' in experience, and as such, it is constitutive of a 'minimal' or 'core self.'" It is also "a form of self-consciousness that is primitive inasmuch as: 1) it does not require any subsequent act of reflection or introspection, but occurs simultaneously with awareness of the object; 2) does not consist in forming a belief or making a judgment, and 3) is 'passive' in the sense of being spontaneous and involuntary." This is distinguished from our social, narrative self.
>
> This core self is directly related to a sense of I-ness, one's autonomous individuality. So while it might be before the narrative self with its sense of egoic history, it is a self-awareness nonetheless, unique to its perceiver and self-centric. It is even associated with "bodily processes of life regulation," generally the most primitive brain. So in itself it is not enlightened consciousness but lizard survival awareness, and only through training is this self-regulatory attentional baseline modified and refined.

Training of our base awareness with its co-arising sense of self is, as noted by Thompson above, an internalized social process. The narrative social self is needed to abstractly 'witness' our baseline core self and integrate it with the other aspects of consciousness. Damasio (2012) noted that only after humanity developed a narrative social self sense with language were we capable of consciousness. He also noted that

> the core self is built upon the proto-self, which is non-conscious at the neural level and communicates via images. This level regulates the human organism in response to external objects in the environment. Even this level is tied to relationships with others external to itself. Said image schemas have been explored in depth by Lakoff (1999) as the very foundation of all later developments. From both ends the accomplishments of individuality and metacognition are generated from correlational social and environmental factors.

RECONTEXUALIZING WESTERN ENLIGHTENMENT

One approach is that of Keith Chandler (2001). Civilization is essentially linked to class and domination and is what provokes the first deep spiritual crisis of humankind. Religions emerge both to make sense of the general suffering induced by alienated and exploitative class societies and to justify the social order. This work of comparative religion outlines four fundamental different answers to the human spiritual crises of being thrown into an alienated world, but it can be overcome through a post-civilizational approach. Indeed, if one equates civilization with class-based domination then it is also clear that modern human history, even if it is still based on such exploitation, has also started challenging it. Liberalism has recognized equal rights under the law, and socialism wanted to make these rights real by adding the material measures. Since then, egalitarian identity movements on race and gender have completed the picture. The ideal of much of humanity, even if perhaps not of the whole of humanity, is no longer *Homo Hierarchicus* but *Homo Aequalis*.

In "The Next Buddha will be a Collective" (Bauwens, 2008) it was argued that epistemologies, spiritual practices, beliefs and forms of organization are broadly correlated to the material conditions of the societies in which they evolve. In addition, a new set of emerging techno-social developments, summarized under the concept of 'peer to peer' and the commons, are preparing the conditions for new forms of spiritual practice, essentially preparing for collective enlightenment. Given that there are strong and demonstrated correlations between changes in technology, society and human consciousness, there is also a strong correlation between a universally networked communication capacity, social organizational models and human consciousness. Current networked technologies create a near-universal capacity not just for many to many communication, but also for self-organization and value creation. Hence, the emergence of commons-based peer production in which productive communities mutualize their knowledge through contributions (peer production), organize themselves in peer to peer networks (peer governance), and protect their common work as 'commons' (peer property). This is preparing a socio-economic and spiritual, 'value shift', or shift in value regimes. This is strongly related to the relative dominance of allocation methods.

Karatani (2014), Fiske (1993) and Ronfeldt (2006) have argued four allocation methods have existed at all times and in all regions, but under different configurations. Pooling, i.e. commoning, is the original dominant allocation method in small nomadic bands, while reciprocity arrangements (the gift economy) become more important in larger tribal federations and societies. This eventually leads to sedentarisation and the birth of class societies, in which rank-based distribution becomes dominant. Finally, first in Europe and then in the world, capitalism, i.e. market-based allocation becomes the dominant modality. The dominant spiritual practices are very different in these different value regimes, and authors like Weber (2002) have shown the strong correlation between the Protestant Reformation and the consciousness that was necessary to transform into fully capitalist societies. A recent author who has broadly argued in the same vein is Jeremy Rifkin.

Jeremy Rifkin (2010b) has provided a YouTube video summary of his lengthy book *The Empathic Civilization* (2010a). Therein he begins with developments in evolutionary biology, cognitive neuroscience and childhood development, which challenge the long-held belief that humans are self-interested and utilitarian. Such beliefs also influenced how we structured our institutions and economy. Current research into mirror neurons finds to the contrary that humans are motivated by empathy for others. When a child starts to recognize itself as an individual it does so in the context of an empathic socialization process, internalizing that process. Increasing child and adult development progresses with increasing empathic development.

Rifkin proceeds to show the changes in society from past to present based on this empathic development. In forager-hunter societies communication was limited to shouting distance within the local tribe. Empathy was extended to the tribe while those outside it were considered aliens. Writing emerged in agricultural civilizations that allowed our empathy to extend to religious groups. With the industrial revolution and electrical communication our empathy is extended once again, this time to a larger organization called the nation-state. Now new technologies like the internet are providing a framework that allows us to communicate with the entire world, thereby extending our empathy to the entire biosphere. It is this last development that provides for a collective, planetary enlightenment.

Rifkin (2010a) goes into far greater detail in his book on the topic. Therein he associates stages of cultural consciousness that accompany forms of communication above. The challenge is to enact a further evolution in consciousness to meet the dire circumstances of our time. To do this we must look to the ecological sciences to see the interrelationships between everything in the environment, as well as ourselves

within that environment and within our cultural contexts. The point of investigation must be the entire ecosphere.

Empathy within an ecological consciousness expresses as spiritual awe at our connection with everything. We transcend our individual selves in this embodied, embedded, enactive and extended union while still retaining our individuality. This entails an individual developmental growth that also realizes the ecological connections and integrations within the various part of our self: reason, emotions, feelings and sensations. At this stage our empathy can transcend the individual, the tribe, the religion or the nation and enact caring relationships with the entire ecosphere. We have indeed arrived at the beginning of our collective enlightenment.

Rifkin (2014) further describes how this ecological consciousness manifests via the collaborative commons. We shift to renewable energies that can be installed on our individual homes or businesses. Such energy sources, while intermittent, can be stored in new battery technology or hydrogen fuel cells. Since we will be increasingly connected to the Internet of Things we can sell excess energy to the grid that someone can use on the other side of the globe. Three-D printer technology empowers local businesses and governments to produce goods that don't require expensive and polluting long-range transportation. Education is conducted more on a collaborative basis where teachers facilitate students to participate and create innovations instead of just learning by rote, and often at lower tuition if not entirely free. Such sharing and exchange of energy, information and products is indeed conducive to a collective and collaborative enlightenment.

METACOGNITION IN SELF AND CULTURE

The following combines the recontextualized meditative metacogntion discussed above with the individual and socio-cultural developments outlined by Rifkin. The Presencing Institute (PI) grew out of the MIT Center for Organizational Learning founded by Peter Senge. He teamed up with Otto Scharmer and they found that those engaged in system dynamics were adept at analyzing and solving problems effectively, but only when combined with a certain quality of awareness. Their work was published in Scharmer's *Theory U* (2009) and *Presence* (2005) co-authored by Scharmer, Senge, Jaworski and Flowers. They determined that the structure of consciousness determines institutional forms[4]. PI is an ongoing, collaborative effort to implement Scharmer's latest book (with Kauger) *Leading from the Emerging Future: From Ego-system to Eco-System Economies* (2013a).

At PI they discuss the 'from ego to eco model.' Examples include "The matrix of social evolution" and "The matrix of economic evolution." In the first it's reiterated that form follows consciousness, and how this manifests in individuals, groups, institutions and global systems that "requires crossing a threshold of self-reflective meta-awareness on multiple levels." Eco-systems awareness is currently the latest development. In the individual domain this manifests as generative listening, likened to a jazz musician in an ensemble. It requires each participant to hear the entire ensemble at each moment in order to improvise something creative in the moment. For groups it requires meta-awareness on the process of dialogue. For institutions it requires meta-awareness on the process of networking. For global systems it requires coordinating multiple systems of awareness-based collective action.

Regarding economic evolution, like the above section, it goes through the stages prior to the eco-mode. Each stage continues the logic of the previous stage but also mitigates it within a larger meta-context. The motivation behind transitioning into the next stage is provided by exterior challenges and interior changes of consciousness when a stage no longer effectively functions. The eco-mode discusses organizing around the commons, which includes co-creating the state, market and NGO sectors.

In Scharmer's blog post (2013b) he correlates the history of consciousness with economic paradigms. You can see how this in some ways parallels Rifkin's stages, though not exactly. Hierarchical central planning correlates with socialism and mercantilism. The competitive free market economy with self-interest, although he calls this decentralized planning, I guess in distinction with the kind of State socialism of the past. Next is the social market economy that takes other stakeholders into account, more like conscious capitalism. Finally is the commons, where all stakeholders including the ecosystem are considered. Like Rifkin he sees that depending on culture and context, all of the above co-exist in combination. But there is a general tendency for there to be an increasing complex progression as well, where the more complex enfolds the lesser.

Scharmer discusses how the self can be alienated from the environment, society and ourselves. All three domains are inextricably related. The spiritual divide is not from some divine being or reality as such but "between the current self [...] and the emerging future self," akin to the potential virtual domain noted above. He correlates the spiritual divide with our current governance systems not giving voice to the people and private property rights. And that all of the above disconnections are tied to our economic paradigms. Economically we are moving in the spiritual

areas noted above, toward awareness based collective action and commons based ownership.

THE SOCIO-CULTURAL MATRIX

The articulation of modernity, based on a autonomous self that creates society through the social contract, has been changing in postmodernity. Simondon (1992), a French philosopher of technology with an important posthumous following in the French-speaking world, has argued that what was typical for modernity was to 'extract the individual dimension' of every aspect of reality, of things/processes that are also always-already related. And what is needed to renew thought was not to go back to premodern holism but to systematically build on the proposition that 'everything is related', while retaining the achievements of modern thought, i.e. the equally important centrality of individuality. Thus individuality then comes to be seen as constituted by relations, from relations.

This proposition, that the individual is now seen as always-already part of various social fields, seems to be one of the main achievements of what could be called the postmetaphysical turn. Atomistic individualism is rejected in favour of the view of a relational self, a new balance between individual agency and collective communion. Another step in this process is to recognize the level of the collective, i.e. the field in which relationships occur.

If we only see relationships, we forget about the whole, which is society itself. Society is more than just the sum of its relational parts. Society sets up a 'protocol', in which these relationships can occur, it forms the agents in their subjectivity, and consists of norms which enable or disable certain types of relationships. Thus we have agents, relationships, and fields. Finally, if we want to integrate the subjective element of human intentionality it is necessary to introduce another element, the object of sociality.

Indeed, human agents never just 'relate' in the abstract, agents always relate around an object in a concrete fashion. Swarming insects do not seem to have such an object; they just follow instructions and signals without a view of the whole. But mammals do. E.g., bands of wolves congregate around the object of the prey. It is the object that energizes the relationships, that mobilizes the action. Humans can have more abstract objects that are located in a temporal future, as an object of desire. We perform the object in our minds and activate ourselves to realize them individually or collectively. Peer to Peer (P2P) projects organize themselves around such common project, and P2P theory is an attempt to create an object that can inspire social and political change.

Edwards et al. (2015) show how the subject and object relate in the cultural networked space that mediates between them. This view questions that there is a clean and clear separation between them that isolates each in their own domain. Their borders are permeable and there is significant cross pollination wherein they still retain their individual autonomy yet influence each other through their relationship. Edwards uses the metaphor of the 'space between' as way to express the culture's bridging artefacts that negotiate this connection/separation. He compares this to the idea of tensegrity, which "refers to the integrity of structures as being based in a synergy between the inseparable and balanced components of tension and compression." Such syntegrality, as he calls it, is not *in* either the subject or object but is the negotiation between them. This helps to overcome the dichotomous thinking about subjects and objects. Also of significance is that tensile structures have a virtual centre that is not occupied by a metaphysical premise like an underlying, unifying idealism. (Recall the above on the virtual domain in post-metaphysics, as well as footnote 2.)

Edwards (2007) references the Vygotsky-inspired CHAT school: Cultural-historical activity theory. CHAT explores factors like artefacts (e.g. tools, language) in mediating between a subject's encounter with another person, the culture or the environment. This view presumes that the process of individuality is induced via activity within these broader contexts.

Such a view has a spiritual connotation in that these mediating factors – words, gestures, artefacts, social media – connect us to wider empathic embraces. As but one example from metaphysical lore Edwards sees this idea contained in the Word from the Bible, as it was in the beginning the word of God that created the universe. The Word is this communion of God with his universe, hence the notion of religious communion services where we partake of food and drink, other mediating factors, to achieve this relationship. It also indicates how relationships operate between self and other on more mundane levels, like sharing thought, feelings or a meal with another. In this way we express love in all its forms.

Operating from such a perspective allows peers to instil in each other our highest aspirations, ideals and motives, like sharing information and resources. Like lifting each other up with our particular gifts, while receiving another's particular gifts when we are in need. We extend this love to our environment, nurturing its well-being via sustainable policies and practices that in turn support and provide for our nourishment and health. And one form of expressing such high ideals is through mediating cultural stories that inculcate in us such values, like "the pearl of great price" or "I have a dream."

Such high aspirations and values arise when, like Rifkin noted, we as a culture develop to a place where our empathy reaches out to all people and the world in which we live. A large factor in inculcating this value system depends on who controls our media sources and technologies. This is why the collaborative commons, in creating alternative sources via social media using the tech of the internet and net neutrality laws, has been able to promote such a value system outside of the dominant paradigm of mainstream media that seeks only its own rewards at the behest of its corporate masters. New forms of mediation grounded in higher forms of consciousness are necessary in this transition to, and eventual dominance of, an ecologically sound collective enlightenment.

CONCLUSION

Another aspect to this fundamental change taking place is based on European history. In the medieval Christian civilization the triadic conception of life held by St. Paul and St. Augustine, based on original sin, Man was seen as fundamentally defective but able to transcend this condition through belief and following commandments. But this created a dangerous form of 'righteous' consciousness that had very little insight into projection mechanisms. This means that all kinds of conflicts where couched in religious terms with the demonization of opponents. The world between the 15th and 18th century is one of incessant religious civil wars on a continental scale (at least in Western Europe). Hence, the reaction of the philosophers of the Western Enlightenment insisting that humanity's self interests should be recognized, and that a good social and economic system would be based on that recognition. This is the basic premise of neoliberalism, which believes that if all individuals follow their own interests an invisible hand or a strong sovereign would lead to the common good. However the limits of such an extractive philosophy have shown their ecological and social limits.

Hence the urgent need to shift into a postmetaphysical collective enlightenment. This turn to the collective does not in any way present a loss of individuality, even of individualism. Rather it transcends and includes individualism and collectivism into what could be called *cooperative individualism*. This cooperativity is not necessarily intentional (i.e. the result of conscious altruism) but constitutive of our evolving consciousness in all domains, and the best applications of the above are based on this idea.

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[1] Bohman et al. (2014) description of Habermas: "Habermas adopts a more naturalistic, 'postmetaphysical' approach (1992a), characterized by the fallible hermeneutic explication or 'reconstruction' of shared competences and normative presuppositions that allow actors to engage in familiar practices of communication, discourse, and inquiry. In articulating presuppositions of practice, reconstructive analysis remains weakly transcendental. But it also qualifies as a 'weak naturalism' inasmuch as the practices it aims to articulate are consistent with the natural evolution of the species and located in the empirical world (2003a, 10-30, 83ff); consequently, postmetaphysical reconstruction links up with specific forms of social-scientific knowledge in analyzing general conditions of rationality manifested in various human capacities and powers."

[2] Bryant (2011b) discusses how Bhaskar sees the difference between the transcendent and transcendental. The former assumes a metaphysical foundation for knowledge as described above. Transcendental deduction bypasses such a framing by speculating on what virtual preconditions must be supposed for knowledge to be possible. The virtual by this definition is multiple and immanent without any need of a transcendent, metaphysical underpinning. Bryant (2008) explores this in depth in another book about Deleuze.

Nobuhara (1998) asserts that for Hartshorne relative (r) terms are the basis of absolute (a) terms, noting: "As the concrete includes and exceeds the abstract." The ever-changing relative domain includes within itself the abstract absolute. He defines the absolute as supremely relative, or surrelative.

Another way of approaching the asymmetrical relationship between the relative and the absolute is through basic categories and image schema as elucidated by Lakoff (1999). Recall that these prototypes are in the middle of classical categorical hierarchies, between the most general and the most particular. Basic categories are the most *concrete* way we have of relating to and operating within the environment. Thus both the more particular and more general categories are more *abstract*. And yet our usual way of thinking is that the more particular the category the more concrete or relative the object it represents is and vice versa.

Which is indeed related to the absolute being asymmetrically dependent on the relative, if by relative we mean those concrete image schema which are the basis of more abstract derivations. It's easy to confuse them because our 'common sense' associates the more concrete objects of the world with the most particular objects on our constructed hierarchies; the same for the most abstract and ephemeral of thoughts, which do not seem physical or material. And yet these hierarchies are not constructed that way, instead being from the middle up and down via image schema and basic categories.

Such things are unconscious and not readily apparent. So of course we can 'reason' from both the bottom-up and top-down in such hierarchies if we associate the relative with the most particular and the absolute with the most general or abstract. But we do so from the most concrete of image schema, the actual relative, while the top and bottom of the usual, classical hierarchy are the most abstract.

[3] Habermas (1992) explored via Mead how our individuality is generated in the first place.

"[I]ndividuation is pictured not as the self realization of an independently acting subject carried out in isolation and freedom but as a linguistically mediated process of socialization and the simultaneous constitution of a life history that is conscious of itself" (152-3).

"[O]riginal self-consciousness is not a phenomenon inherent in the subject but one that is communicatively generated. [...] The consciousness that is centered, as it seems, in the ego is not

something immediate or purely inward. Rather, self-consciousness forms itself on the path from without to within, through the symbolically mediated relationship to a partner in interaction" (177).

In my words, even the process of meta-awareness that we suppose is an individual achievement of meditation was preceded by how individuality is first enacted via socialization and language. That social process of self-reflective ego formation is indeed this meta-aware watcher (I) watching itself (me).

The practice of meditation brings this unconscious process into a more (but certainly not fully) conscious awareness. We could then project a more universal and ideal community valuation (another me) via meta-awareness of this postconventional I. It's a reiteration of the original meta-awareness process begun through conventional ego formation.

[4] Lenski (1996) thinks it's the other way around. In his ecological-evolutionary theory, technology is the primary force is social change. Advanced technology provides a wider range of options which increase the potential for ideological change. Technology alters the system of rewards and costs and thereby changes preferences and choices. Either way, a change of consciousness accompanies technological change.

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ZACHARY STEIN ~ MARC GAFNI[1]

THE APOCALYPSE OF THE MODERN WORLD-SYTSEM

& RELATED POSSIBILITIES FOR DEMOCRATIZING ENLIGHTENMEN

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INTRODUCTION: ON ENDGAMES AND EMERGENCE

For *Spanda Journal's* special issue on "Collective Enlightenment" our goal is to offer a few thoughts toward framing collective enlightenment in terms of the current epochal crisis of geo-political and historical dynamics within the modern world-system. Understanding the present historical moment in this way has been one of the central themes of work at the Center for Integral Wisdom since its inception. In our language we have been exploring the relations between *existential risk* and the *democratization of enlightenment*[2]. By existential risk we mean risk to the very survival of our species, given unprecedentedly dangerous realities on multiple fronts ranging from potential infrastructure and environmental collapse, to rogue terrorism, out of control technologies and more. The only response to existential risk is a fundamental and large-scale transformation of identity and worldview. As we discuss below, the "democratization of enlightenment" is a possible next step in cultural evolution and by far the most effective response to existential risk. It is only a fundamental cultural evolution – an up levelling of our Story of Self and Cosmos – that has the capacity to be the change that changes everything. The articulation of a new vision rooted in the democratization of enlightenment is part of a vital and urgent emancipatory project.

We are placing certain esoteric spiritual narratives that have long pointed to an immanent planetary awakening alongside narratives from the social, political, and historical sciences, which have long pointed to a developmental fulcrum or tipping point in human socio-cultural evolution. When humanity has entirely encircled the Earth with technology, and geographical frontiers have disappeared along with Cheap Nature and Cheap Labour, then occurs the apocalypse of the modern world-system. These two ideas – the emergence of widespread collective enlightenment and the end of the modern world-system – are related in that they both signal a near-future evolutionary leap to a radically new way of being human, an dramatic geo-historical movement that effectively closes out one era of civilization and ushers in another.

There is difference between the end of *the world* and the end of *an historical world-system*[3]. But the categories and rituals of apocalypse apply to both. *Eschaton*, from the Greek ἔσχατος (*éskhatos*) meaning "the last" or literally "the uncountable," is used in theology to refer to the final events that conclude the sacred history of the world. If the apocalypse is *the end*, the final unveiling, the eschaton is *the end game*, the final climatic scene of the cosmic drama. These categories from Western theology are useful because they remind us that humans have long grappled with the idea that our being on Earth is of finite duration. While twenty-first century climatologists and geo-political strategists do not speak in theological terms they nevertheless conjure up ideas deep in the human imagination. Is humanity not, in these times, living out an *eschatological drama*? At least since the 1960s, "the end of days" has been brought from myths and prophesies into the realities of weapons science and environmental forecasting. The second decade of the new millennium has brought a heightened sense of our species' fragilities and a new level of intensity and thought about how our world-system's end game will play out. Apocalyptic visions are reverberating through social media and across the big screen, while leading scientific minds and wise indigenous elders alike are making specific near-term predictions concerning the extinction of the species. Before anything thing like collective enlightenment can even be considered as possible humanity must come to terms with the mortality of the species. The shocking reality of our fragile existence has only just dawned on global culture in the wake of Hiroshima, Watson and Crick, and the immanence of The Singularity[4]. Indeed, the end of humanity may be more likely than the emergence of a new world-system. There is a high probability that the modern world-system will simply tip into catastrophic existential failure as it wobbles and bifurcates unsustainably, out of equilibrium, beyond possibilities for self-correction. Stabilizing an emergent higher-level equilibrium for the total planetary world-system requires nothing less than making common what appears now as miraculous: *the democratization of enlightenment*.

WORLD-SYSTEMS ANALYSIS: PROPHESIZING THE END OF PROFITS

Humanity is in the midst of closing out a particular historical era. The perceived legitimacy of governments will continue to decline as the number and intensity of humanitarian crises continues to crescendo. These processes will culminate in a series of ecological and economic tragedies, with related militarized political dramas and, eventually, the catastrophic emergence of a radically new kind of world-system (or systems). If humanity fails to navigate a world-system shift in the next 30 years we may well instead be involved in a more ultimate ending, as the biosphere-capital matrix of value extraction precedes unabated, undercutting the conditions that allow for human life. The modern world-system, which began to emerge during the 16th century, is the largest functionally integrated social unit the human species has ever created. The ideas of "world-systems," "world-economies," and "world ecologies" are essential for any serious thinking about evolutionary futures for the human species[5]. The fields of world-system analysis and world-ecology represent a growing trans-disciplinary movement, encompassing economics, geography, politics, sociology, history, and ecology.

The modern world-system has been built around the ready availability of Cheap Nature. The discovery and exploitation of new frontiers of Cheap Nature, especially of energy, food, and labour, has long allowed for resolutions to capitalism's recurring *developmental crises*. For example, take the pivotal switch in energy-commodity frontiers from wood to coal, which signalled the emergence of the so-called "second industrial revolution" – the revolution of steam engines and railroads that transformed whole continents. During the early eighteenth century in Western Europe and England, trees were becoming expensive as forests began competing for space with the agricultural land needed to feed growing city populations. Crisis was immanent until new mining techniques and labour control regimes allowed for the opening of *underground* energy frontiers. Massive veins of rich petro-fuels just there for the taking (actually, it meant taking as "free" millions of years of "work" done by natural processes). And, importantly, it was available outside the existing conflicts and scarcities of the land. New Cheap Nature. Problem solved. Of course, we all know the story of the petro-fuel industries, the results and end game of which we are seeing all around us.

It is likely that the dawning of the twenty-first century signals the modern world-system's *cumulative* or *epochal* crisis. The last frontiers of Cheap Nature are disappearing. The "taps" – resources flows, like water, oil, and soil – are running out. The "sinks" – waste dumps, like the atmosphere, oceans and human body – are filling up. There is nothing left "outside" the metabolism of the world-system. There is nowhere left to go to find new taps and sinks.

While we leverage the language of crisis here and suggest that we have reached the ecological and geographical limits of the modern world-system[6].

We mean only to point to the limits of nature and society as we know them now. Nature, including human nature, is more than is dreamt of by human capital theory and neo-classical economics. This is a theme that plays out throughout our published work, including discussions of metrics, social miracles, and the future of educational technologies[7].

A world-system is defined in terms of a geographical region that contains a singular division of labour, coherent political and bureaucratic apparatuses, and a distinct organization of the world-ecology. World-systems co-evolve with cultures, and there is, or has been at least since the 1970's, a truly planetary culture; or better: there is a global ideology being broadcast from a polycentric world-system that reaches every corner of the Earth. Previous world-systems were only planetary in ambition. Ultimately, they were circumscribed and competed with other world-systems on their fringes. When trade and communication took place between ancient civilizations it was, in fact, an exchange between world-systems. This differs from what we know today, which is trade and communication between different societies within a single world-system. Previous world-systems such as those along the Nile and Indus River valley were, to say the least, not organized by capitalists. They were based on economic systems, ideological formations, and personality structures vastly different from our own. The existence and continuation of our modern world-system has fundamentally changed the very frontiers of human possibility and fundamentally altered the self-regulatory processes of the biosphere itself.

The modern world-system is now close to literally encompassing all of humanity while at the same time exhausting the limits of the biosphere. This is something never achieved by any existing historical world-system. Based on an analysis of long-term global trends in economics and political history, contemporary world-systems analysts argue that we have reached a crucial moment in geo-history. When any complex system reaches its structural limits an evolutionary crisis ensues and a fundamentally new kind of system must be painfully and violently born[8]. It is no different with the complex dynamic systems that comprise humanity's planetary civilization. We are currently in just such an evolutionary crisis; we inhabit a transition between world-systems.

Today, we are witnessing simultaneous and interactive crises playing out amongst our broadest social structures and their biospheric corollaries. The human-biosphere relationship is being fundamentally renegotiated. In the midst of all this *external* transformation there are, of course, related changes in human consciousness, culture, personality, and capability. Our global crises have an *interior* dimension as well. *Consciousness itself* is as important as energy, economics, or military-technology industrial complexes. Educational abundance and new forms of collaboration are needed to up-level human abilities right at the same time new structures and lifeworlds need building. The near term extinction of the species is unlikely precisely because of our latent capacities for individual and collective enlightenment.

THE RISING PSYCHOLOGICAL TEMPERATURE OF THE PLANET: #ESCHATON@APOCALYPSENOW#WHO'SFUTURE

Telihard wrote about the "psychological intensities of the Earth" in terms of "the rising temperature of the Noosphere[9]." He believed humanity was folding in upon itself in a divine process of planitization. Evolutionary conditions are such that they create an ever rising temperature within the noosphere, a process involving cultural convergence and conflict, proliferating technologies of communication and transportation, scientific discoveries, religious revelation and revival, all playing on upon an increasingly small and crowded global stage. Telihard believed this would climax in an intensification of the collective consciousness of humanity so unprecedented as to be incomprehensible before its occurrence: the so-called Omega Point, beyond which are possibilities for human evolution that we cannot even conceive. That is to say, the noosphere will keep "heating up," humanity will keep increasing its psychological temperature, until the result is essentially a state change or phase shift in the nature of consciousness itself. This is a vision of the eschaton as collective enlightenment, held in the mind and heart of a Christian evolutionary mystic.

Teilhard's vision echoes ideas found elsewhere in Western esotericism, such as the Trans-Himalayan Tradition[10], which tells of the emergence of a "6th post-Atlantean" planetary epoch, characterized as involving new forms of collective consciousness and communion between people and the other sentient races of the Earth. Telhard's boiling over (literally state-change) of the consciousness of the noosphere also echoes the conception of *God's evolution* found in process theology, stemming from Alfred North Whitehead. Evolution is God in motion, unfolding toward intensities and polarities, a rising of awareness and energy, an always-increasing contrast and dynamism within the prehenisve scope of actual occasions[11]. The eschatology of process theology the characterizes climax of sacred history as the evolution of a totalizing or integral consciousness in which humanity is transformed by Divine Self-Awareness and thus lifted into wide-

spread *participation mystique*. The great Indian sage and political revolutionary Sri Aruobindo put forward a similar vision, which included the decent of the Divine Super-Mind and the accent of human consciousness through individual and socio-political evolution, resulting in the birth of a new being following the collective enlightenment of humanity[12]. Similarly, the Jewish visionary scholar, activist and mystic, Abraham Kuk, calls forth a vision of an enlightened *polis* where human beings awaken *en masse*, incarnating in their collective personhood, as the leading edge of evolution[13]. More recently, the cultural leadership of Barbara Marx Hubaard and Marc Gafni has taken up this lineage; partnered at the Center for Integral Wisdom, an expanding praxis of *Conscious Evolution* explicitly takes up the vision of Teilhard, Aurobindo, and Kuk, a form of post-post-modern evolutionary mysticism, activating souls in the catalyzing of a Planetary Awakening in 2020.

These provocative esoteric ideas showcase one of several ways to understand the meaning of collective enlightenment. They characterize it as a rare historical or evolutionary event during which massive numbers of humans are simultaneously lifted into a new more enlightened state of consciousness and cooperation. Another way to understand collective enlightenment is as a sate of consciousness and capacity that is always already present and immanent in the field of human relationship, which can emerge spontaneously during profound mutual understanding and interactions. While both (and other) definitions of collective enlightenment are good, we are interested in exploring a deeper understanding of the former, i.e., the world-historical-consciousness-shift definition.

This is why we are interested in "social miracles" that will catalyze both a transition beyond capitalism and the emergence of a society that is more enlightened[14]. So to conclude here we want to engage in some *concrete utopian theorizing*[15]. While the majority of speculation about the future focuses on great leaps in science and technology, the futures scenarios we are interested in instead focus on great leaps in human morality and political consciousness. Our thinking departs from the dystopian techno-scientific futures that dominate public consciousness. From sci-fi movies to the nightly news it is techno-science-gone-wrong, zombie apocalypses, and malevolent Artificial Intelligence, images and narratives consumed by the youth in particular. Pop culture visions of positive futures usually also hinge on new breakthroughs in techno-science. Sometimes it appears that our future is one in which humanity is either destroyed by techno-science or saved by it. In either case, as a culture we are starved for visions of the future that involve radically different political and moral innovations. Humanity longs for visions of breakthroughs in consciousness and culture.

Futurists like Rameez Naam and others have often pointed out that the future of humanity is dependent on innovation. Indeed, it is only innovation that will move us from dystopian futures to utopian ones. Naam, however like many other thinkers of his ilk, thinks of innovation as taking place primarily in the realm of exteriors[16]. The techno-optimists implicitly or explicitly claim that new technologies and even new systems of government – exterior changes in the social or technical structure of society – will being us to a new and great future. We call this sort of thinking the Epcot fallacy. Millions of people of all ages have visited the Epcot pavilion at Disney World. It is filled with exhibits of smiling families, ensconced in the delight of myriad future technologies, which Epcott was designed to exhibit. Why is everyone smiling? The pavilion suggests they are happy because of all the new technology. Epoctt does ever not raise the more basic question: *does technology make people happy?* By the Epcott fallacy we refer to the often-repeated assertion of the techno-optimists, that innovation in the realm of exteriors can make us happy. It takes more than technology to truly change the course of the world-system. The Renaissance, for example, which climaxed in the Western Enlightenment and the Industrial Revolution, was a catalyst for a world-system shift. The shift however was not merely one rooted in technological advance and the emergent scientific method, as much as that is a major part of the story. Rather the shift was sourced in dramatic innovation in consciousness, the emergence of a new story of Self and Cosmos. The root of the world-system shift was interior innovations, from which the scientific method emerged, and then flowed all of the technological breakthroughs.

It is important to understand that what stops humanity from living in a world of justice and abundance – a world in which collective enlightenment is common – is not a lack of necessary technology and science. The culture of late-capitalism would have us believe that only scientific miracles will save humanity, and preferably those that will turn a profit and help maintain economic growth (so-called "disaster capitalism'). But the truth is that new technological innovations without genuine social miracles will not save us. There is no saving of humanity without social miracles. What stops humanity from living in a world of justice and abundance are the stories we tell ourselves about ourselves, the rules we have made up that now govern our cooperation, and the legacies of illusion

and dishonesty that continue to blind us to our actual situation as a species.

A truly "collectively enlightened society" would not just find opportunities for expanding consciousness and capacity within existing systems of law, culture, and labour markets, but create whole new systems guided by the idea of maximizing educational opportunity for lifelong learning and cooperative endeavours. This is the simple concrete utopian vision we are offering here: *educational abundance* resulting from the repositioning of learning and human development as a dominant social value. To put it quite simply: most of our major social structures, such as labour markets and legal systems, are designed to promote economic growth, *period*[17]. We are asking: what if they were designed to promote human development and learning instead? What if the goal of society – as encoded in its very legal structures – was not endless accumulation of wealth but the endless actualization of human potential? What if we designed the basic structures of our social systems to catalyze collective enlightenment?

Economic realities and the actualization of human potentials are related. We now depend on many forms of material abundance made possible as a result of over four centuries of growth-oriented structures within the capitalist world-system. The modern world-system, like all socio-economic systems, is also a system of human capacities. Basic structures and institutions shape the skills and dispositions of the people who work and live in them. The modern world-system has shaped the very face of the Earth; it has also remade the human mind and heart. It has made possible an abundance of human creativity, skill, and intelligence along certain lines. But it has also *constrained* human development. Economic factors have dictated both what is passed on to the next generation and what resources are available for doing so. In some areas we have explored human potential magnificently while in others we have literarily suppressed exploration[18].

Social conditions could be created that will enable a future of educational abundance in which the frontiers of human potential are opened wide and enlightenment is democratized[19]. The demands of our historical moment require the re-design of social structures in all sectors so that educational configurations can be transformed in ways that assure all people get what they need. We are looking beyond the realm of what our culture tells us is possible. We are looking out beyond the limits of our current stories (or meta-theories) about what human society is and can be. The radical reforms we write about elsewhere – such as a Global Debt Jubilee and a Universal Basic Income Guarantee – are referred to as *miracles* because they appear "supernatural" to conventional consciousness. They seem impossible, almost against the laws of human nature. It seems naïve to suggest these as political ambitions. However, the simple truth is that the democratization of enlightenment, requires as a prerequisite social and economic justice, from which follow a society of educational abundance and the condition for the possibility of a collectively enlightened humanity.

When world-systems transition, as they have at several key moments in human history, collective capabilities and consciousness change profoundly. The unprecedented state of human consciousness and capability often called "collective enlightenment" is a world-historical emergent on the horizon for us today. Two turnings in the last two millennia give a sense of what world-system transitions are like. About 2000 years ago, when the world-system pivoted around the Roman Empire (the turning of the axial-age), it was "individual enlightenment" dawning as the focus of human self-understanding and ability. This was one of the great contributions of the axial-age religions, the realization of that gnosis which leads to transformation, available through intense practice of heart, mind, and body. The individual could rise above the masses and nature to attain some level of Enlightenment. Before the axial religions the idea of individual liberation was absurd for anyone but a King (and even he was at the whim of the gods). The genuine possibility of individual transformation and liberation was a momentous leap in the evolution of consciousness, which was virtually ungraspable until it arose. This innovation in consciousness would transform the face of the planet, and set the stage for another.

A little less then a thousand years ago the nascent idea of democratic governance began to emerge. At first the notion was so subversive that to suggest it would likely get you killed. Democracy was a pejorative term for most of the history of its use, meaning basically just "mob rule." How could anyone possibly believe that every person in a country, regardless of their background, station or rank would have an equal say in the determining the laws of a country and in choosing who would actually rule? The idea was seen as both, heretical, absurd and highly dangerous to the welfare of society. However, as we know, the idea gradually evolved until with the advent of the Western Enlightenment the democratization of governance slowly became a given. In the last hundred years democratization has been radically extended to including women and "others" previously marginalized. Today any child who grows up in the western world takes the democratization of governance as a given.

We are suggesting that one thousand years later – today – at precisely the moment when it is urgently necessary, these pervious evolutions of culture must come together for the sake of the future. When the vision of classic Enlightenment merges with the vision of political democratization what is generated is the next great leap forward in cultural evolution, *the democratization of enlightenment*. The first harbingers of the democratization of enlightenment are being experienced already as spontaneous moments of "collective enlightenment" in small groups. These groups at the leading edge, like always, are the potential harbingers of tomorrow's humanity.

Many of these small group experiences can be understood as delicate and context sensitive "Unique Self-Symphonies" – a term emerging from Marc Gafni's Unique Self Theory, pointing to the egoless and decentralized cooperative endeavours that emerge among post-conventional personalities[20]. Unique Self Theory is an answer the single most important question that every human being must answer: Who Am I? Unique Self emerges from the confluence the leading edges of pre-modern, modern, and post-modern insight. We will state here the basic premises of Unique Self theory in a few short sentences. From these premises naturally emerges the democratization of enlightenment, and ultimately what in Unique Self Theory is referred to as a Unique Self Symphony.

Unique Self is not another word for separate self or what is sometimes termed the ego self of western psychology. It is not the your particular talents or your personality type as it might appear on a Meyers Briggs test. Rather Unique Self appears most clearly "on the other side" of what is often referred to as True Self. True Self is the singular that has no plural. The total number of True Selves in the world is one. This True Self is only One; its realization effaces the various differences that accrue to the self commonly known and felt, the "skin encapsulated ego." While overcoming the self and realizing the True Self is the great ambition of so much spirituality and religion, and the great offering of the axial-age religions, this alone is not enough. One the other side of True Self the personal re-emerges. This is not the personal before the impersonal True Self but the personal that transcends and includes the True Self.

The non-dual tantric traditions (out of Asia and Egypt) have long maintained that on the other side of True Self is a non-dual return to the world, as the universal shines through the concrete and signal individual. But they did not yet have a sense of the irreducible dignity of the individual that was to enter world culture first through the Hebraic traditions and ultimately through the Renaissance and later the Western Enlightenment. Unique Self Theory integrates Western and Eastern Enlightenment in a higher integral embrace. We seek to valorise the metaphysical dignity of the individual, which emerged from the Western Enlightenment, but to source this dignity in the Unique Self, as opposed to the separate self. We also seek to incorporate the core realization of Eastern Enlightenment, which is that the individual at their core is indivisible from the larger seamless field of being, which we have been referring to as True Self[21]. Bringing these traditions of Enlightenment together (along with a host of related theories in psychology, sociology, evolution, etc.) opens up a rich landscape of distinctions, practices, and applications, which is the domain of Unique Self Theory.

Unique Self Theory entails the democratization of enlightenment because it points toward an enlightenment of individuation, beyond both ego and True Self, in which the realities of each person's unique person, gifts, and obligations are re-vivified by their awakening. Enlightenment can no longer be seen as an elite achievement, precisely because each individual is non-interchangeable and irreplaceable and has a unique gift that only they can give. If only a lucky few get to be and act Enlightened, then rest of us – the masses – are by definition living and acting in ignorance and ego. This may have been a workable model before democratic government and before existential risks escalated to the point of placing massive responsibilities on the shoulders of everyday people. Today everyone must be awakened to give their fullest gifts and to do their needed good deeds, and these may not be the gifts and deeds traditionally associated with Enlightenment (i.e., you may not take to sitting on meditating on stage, holding discourse, and all the various trappings of those historically praised and treated as Enlightened). Every individual has the capacity to identify with their Unique Self, and thus to be and act Enlightened, although this capacity is too often occluded or inaccessible.

When a group of individuals identify with their Unique Selves it lays the ground for the emergence of a Unique Self Symphony. To understand the true significance of Unique Self Symphonies a prefatory remark is in order. The sciences of complexity and emergence tell us evolution has a *telos*, a trajectory[22]. The trajectory of evolution appears to be towards ever-greater complexity, ever-greater consciousness, ever-greater uniqueness, ever-greater synergy, and ever-greater intimacy. These qualities are inter-included and inextricable from each other all as a part of evolution's arrow. The fifth quality – intimacy – is the one we will focus on

briefly as a way to frame the nature of Unique Self Symphonies as an evolutionary emergent. Beginning with attraction at the subatomic level, one might accurately say that reality is defined by allurement, all the way up and all the way down. From electromagnetic attraction and gravity in the physiosphere (physical reality), to the dynamics of symbiosis and mating in the biosphere (life), to the dynamics of mimetic evolution in the noospehre (culture), reality self-organizes towards every greater levels of interconnectivity. The interior of interconnectivity is intimacy. When Unique Selves are connected to each other in small groups new levels of intimacy are achieved. From this intimacy a kind of collective intelligence emerges which is greater then the sum of its parts. Likewise, when Unique Selves gather via the Internet and connect into larger synergistically integrated collectives then a new quality of intimacy is born. The quality of intimacy found in a Unique Self Symphony is a kind of collective intelligence or enlightenment, representing a local apex in the expression of the evolution of intimacy. A genuine Unique Self Symphony contains a complex motivational architecture that is richer and more potent than any known system of economic or social incentives. One is motivated to participate in evolution itself, to give one's unique gift, and to experience the vital *Eros* and joy of evolutionary community. Even more motivating is the innovation and creativity that is seen to be unleashed from Unique Self Symphonies. This is a bottom up, self-organizing expression of human creativity, soon set to emerge at scale as a new evolutionary form or structure.

Unique Self Symphonies occur in a state of shared non-duality as individuals cooperate beyond ego. This means all members experience a certain quality of interaction and reflection. Terms like reciprocity, democracy, transparency, and natural hierarchy all come to mind. There is a sense that all individuals are profoundly important and that their unique contributions are essential. There is no voice in the group that is marginal. There is no hidden discontent among those who feel used, undervalued, or coerced. Talk to anyone in the group and you will get the same kind of positive statements about their participation: they feel like they are a perfect fit in the group, they are empowered and autonomous while also deeply merged in collaboration and communion. Trust and honesty create an opening in which almost miraculous group phenomena begin to occur, sometimes referred to as "Collective Enlightenment."

Contrast this with groups that "succeed" precisely because certain members sacrifice their uniqueness for the sake of the whole. They become distorted into the shape needed by the group and find ways to silence their inner longings to express more of their uniqueness. Importantly, groups that require some members to distort their uniqueness are unsustainable and inefficient; they will not last. This is because of what it *feels* like to be a part of them. Resentment, fear, alienation, neuroses, and illness, these all follow from the day-to-day distortion of self to fit a social role. It becomes literally imposable for someone in this situation to give their all and try their best. Inefficiencies follow from this. Needs for surveillance and micromanaging arise, as disgruntled group members cannot be trusted to do what is required of them. So while the group my "succeed" for a time and even appear to be synergistic – "like a well oiled machine" – in the long run the group will implode in eruptions of violence, revolt, and self-destructive behaviour. It feels fundamentally different to be a part of a Unique Self Symphony. In this case the emergent collective intelligence and group success is a direct result of Unique Self optimization for all members. There is a felt sense of reciprocal respect and recognition of the unique value of each participant. Each person is aware of their own Unique Self of the Unique Selves of all others. By making use of the unique contours of their puzzle piece, each member of the group merges with and completes both themselves and the larger whole. The Unique Self experience is both the heart of the phenomenon of collective intelligence and the key to its emergence in any given situation. It is also a moral compass, signalling the justice and health of any give social synergy. Groups that function by suppressing uniqueness are almost always unethical. Groups that function by leveraging and respecting uniqueness are almost always just and healthy.

For much of human civilization this kind of personal sacrifice and willingness to truncate the self for group needs was held up as an ethical ideal. The result has been societies in which most of the members are living lives of quite desperation. While there have been times when the shared demands of group survival seemingly demanded societies of this type, that time has passed. Now the survival of our species depends on our overcoming societies that distort and limit individuals and creating instead societies that leverage uniqueness and allow for the emergence of Unique Self Symphonies.

The possibility of a Unique Self Symphony of indefinite planetary scope, sweeping through cultures and institutions, as the late the Roy Bhaskar predicted, via "a silent revolution of love"[23] – a global awakening, totalized collective enlightenment. Such is the end game of the modern capitalist world-system. The eschaton appears immanent, although its catalyst is

not the God of Abraham, but the God of the Market[24]. Those structures that have for centuries provided for the global hegemony of certain economic classes and interests are failing now to provide for any kind of viable future. The question of "what's next?" – as asked by Wallerstein and other heterodox economists – is a question about the silent revolution of love, a question about the shape of a society that looks "collectively enlightened" by today's standards.

♦

[1] Center for Integral Wisdom & Foundation for Conscious Evolution. The order of authors is incidental and decided by coin flip, a custom we follow for all our joint work. It is interesting to note that academic conventions of first and second authors does not allow us to easily capture the dynamics of collaborative Unique Self Symphonies, which is on of the topics of this essay.

[2] On the term "democratization of enlightenment" see, Gafni, *Radical Kabbalah*: 273-278. Integral Publishers, 2012. See also Gafni, *Unique Self*: 21-22,176-177. Integral Publishers 2011. Two more popular presentations can be found: Gafni, Watkins magazine June 2013, 15:46, <http://bit.ly/2qYpKBr>; Gafni, "Three Steps to Democratization of Enlightenment," *Integral Leadership Review*," Oct 2012 <http://bit.ly/2qp4Wkd>.

[3] See Wallerstein (2007) *World-systems Analysis*.

[4] We are not claiming that The Singularity is coming; just that the idea it is coming has a lot of traction in some influential circles. For more on the apocalyptic musing of the economic and scientific elites, see Stein and Gafni (2016) Reimagining Humanity's Identity: Responding to the Second Shock of Existence. *World Future Review*. 7(1) 1-10.

[5] Wallerstein. I. (2007) *World-Systems Analysis*. Moore, J. (2016) *Capitalism and the Web of Life*.

[6] See: David Harvey (1978) *Limits to Capital*. Capitalism tends to solve its problems by spreading out or putting things someplace else in space, the so-called "spatial fix." This worked when there were frontiers. We are probably nearing the end of spatial fixes.

[7] See Stein (2016) *Social Justice and Educational Measurement: John Rawls, The History of Testing, and The Future of Education.*

[8] And see also Capra and Luisi (2014) *The Systems View of Life*, for an up to date review of the literature on complex dynamical systems, autopoises, and other aspects of the sciences that study non-linear biological growth and evolution. Wallerstein's world-system analysis is directly influenced by Capra's theoretical forbearer, Ilya Prigogine, whose foundational work studied the patterns in dissipative structures far from equilibrium, which show emergence and spontaneous structuration. Prigogine foresaw a time when the social sciences could make use of the complex dynamical models being used in physics and systems biology.

[9] Teildhard (1952) *The Future of Man*.

[10] See: Jon Darrall-Rew and Dustin DiPerna's (2016) *Earth as Eden: An Integral Exploration of the Trans-Himalayan Teachings.*

[11] John Cobb & David Ray Griffin's (1976) *Process Theology.*

[12] See: Sri Aurobino (1949) *The Human Cycle: The Ideal of Human Unity, War, and Self-Determination*.

[13] See for example, Poetry of Being, Lecture on the Philosophy of R. Kook, Yosef Ben Shlomo, Hebrew University, 1989.

[14] Stein (forthcoming). *Education in the Anthropocene: Essays On Schools, Technology, and Society in a Time of Planetary Transformation.*

[15] "Concrete utopian theorizing" is not about religious visions of hope or science fiction movies. It is an aspect political praxis and an important method within ethics and philosophy. It consists of articulating preferable futures for society in a principled and realistic way, painting a picture of the practices and personalities that are attainable. It gives a glimpse of easily imaginable utopian options visible from the present. These then serve to guide praxis for individuals and groups, who act not in light of some ideal or abstract code but in light of an actual possible and preferable future. See: Rawls (1971); Bhaskar, (1993) Benhabib (1986).

[16] Ramez Naam's (2013) *The Infinite Resource: The Power of Ideas on a Finite Planet*, gives primacy to the power of human thought and innovation, putting education at the top of priorities when considering world futures. But we do not agree with Naam's emphasis primarily on techno-scientific knowledge and physical instantiations thereof, such as technology and law. Naam explains his limited focus clearly: "the most valuable resource we have and that we have ever had is the sum of our human knowledge – our comprehension of how the universe around us functions and how to manipulate it to our ends" (Naam, Infinite Resource p.vii). Knowledge means scientific theory and technical control – period, end of story about human interiors. What about morality? What about centuries of aesthetic discourse and design? His statement reduces discussions of human knowledge to discussions of techno-scientific control. This is precisely the kind of profound and damaging truncation of human being and knowing that is explicitly counteracted by an integral meta-theory of education as discussed below. There is much more to human knowledge and interiority than techno-science, including the realms of ethics, art, and spirituality. An integral approach embraces the entirety of human being and knowing, and thus recognizes the possibility for educational innovation in more domains than just the scientific and technological.

[17] See: David Harvey (2016) *The Ways of the World.*

[18] See: Murphy (1992) *The Future of the Body.*

[18] This idea is further elaborated in Stein & Gafni (forthcoming) *Towards a New Politics of Evolutionary Love.*

[20] The term Unique Self first appeared in Gafni, M, *Soul Prints* and was used in public teachings throughout the late 90s and early 2000s. It was then elaborated and expanded in the context of Integral Meta-Theory, specifically and at first during the first meeting of the Integral Spiritual Center in 2004. It was thereafter given extensive academic elaboration: see the special issue of the *Journal of Integral Theory and Practice* (6:1) dedicated to Unique Self Theory. See also, Ganif, M. *You Unique Self*; Gafni, M. *Radical Kabbalah*; Gafni, M. *Self In Integral Evolutionary Mysticism.* The idea of the Unique Self Symphony is given academic treatment in Stein and Gafni (forthcoming) *Towards a New Politics of Evolutionary Love.*

[21] In this way that we arrive at an equation, which integrates the fundamental intuitions of Western and Eastern enlightenment into a new theory of Self. *True Self + Your Unique Perspective + Your Unique Quality of Intimacy = Unique Self.*

Expressed in a poetic and expressive modality the core teaching of Unique Self is as follows (this is taken from the preface of our upcoming volume on Unique Self Theory.

Your Unique Self is the best answer available on planet earth to the most important question that reality is asking you to answer every day. Your entire life hangs in the balance –determined by your answer to this question. The question is: Who Are You? The Answer is: *You are an irreducibly Unique Expression of the love*

intelligence and love beauty that is the initiating and animating Eros of all that is, that lives in you as you and through you, that never was, is or will be ever again other then through you.

And as such you have an irreducibly unique perspective – an irreducibly unique quality of intimacy- and an irreducibly unique presence - all of which come together to foster your Unique Capacity to give Your Unique Gift – which address a Unique Need in Your Unique Circle of intimacy and influence. And as such you have the capacity to take a Unique Stand at the abyss of darkness –and declare let there be light – through your unique gift – your singularly unique frequency of light – which has the capacity to light up the word in a way that one else, that ever was, is or will be can do. And as Such, when you give your Unique Gift -the evolutionary impulse awakens in you; you are aligning and incarnating the Evolutionary Impulse.

[22] Obviously there is not space to substantiate this claim or those that follow about the trajectory of cosmic and Earthly evolution, but see: Gafni & Stein (forthcoming) *The Universe: A Love Story.*

[23] See: Bhaskar (2002) *The Philosophy of Meta-Reality;* Stein, Z. (2015) Beyond nature and humanity: reflections on the emergence and purposes of metatheories. In Bhaskar, Esbjorn-Hargens, Hedlund-de Witt & Hartwig (Eds.) *Metatheory for the 21st century: critical realism and integral theory in dialogue.*

[24] See: Harvey Cox (2016). *The Market as God.*

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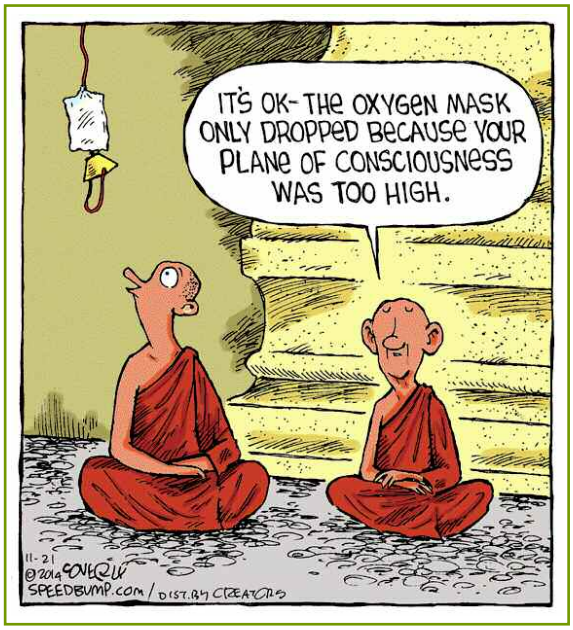

Words that enlighten are more precious than jewels.

HAZRAT INAYAT KHAN

If the doors of perception were cleansed,
every thing would appear to man as it is, infinite.

WILLIAM BLAKE

Before enlightenment:
chop wood.
carry water.
After enlightenment:
chop wood,
carry water.

ZEN SAYING

⊙ ♦ ⊙

MARIYA KALYANIRUPA KARAGYOZOVA

COLLECTIVE ENLIGHTENMENT

THE ASCENT

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♦

This article is dedicated to Lord Siva "by whose mere opening and shutting of the eye-lids there is the appearance and dissolution of the world and who is the source of the glorious powers of the collective whole of the saktis *(the Divine energy in various forms)" and to all of us looking for enlightenment.*

♦

THE IDEA OF THE ENLIGHTENMENT, WHICH brings us together here, is a subject of a long time study and of human interest, currently becoming quite relevant to research and, hopefully, soon to be mandatory as a life issue.

For some of us it comes with the idea of the origin, of meaning, of content and direction of the human existence, the possibilities for change and improvement; for others, it sounds to be the light at the end of the tunnel and, for some other, it could be the light of the projectors they would like to come under.

Whatever formal reason is leading us in search for solutions and answers to all questions, the relationship with God, Supreme Self, Universe, is actually a natural human aspiration for who no longer feels comfortable in the shell of the physical body.

Evolving, abandoning naturalism behind while opening up one by one the layers of the body, humans understand that matter is more than a bunch of cells, that something beyond it moves and guides it. The invisible power that gives life to matter moves, acts, thinks, creates, and is the God in us, is the consciousness. It can be sensed as mind, product of the brain, knowledge, soul, awareness, and phenomenal experience. It also falsely creates self-perception of individuality – self-expressed, unique and self-sustaining. For one reason or another, everyone is looking for a connection with this consciousness – asks, speaks, loves, feels and tames it, and it tames us because it is God, and we all are one.

We will examine the subject of enlightenment, and its individual and collective aspects, following the evolution of consciousness in the texts of Kashmiri Saivism, precisely because they deal with these very concepts, explaining the universe and its emergence, existence and functioning.

The examination here proposed bears a spiritual sense, not religious, and I would like you to read it contextually. The use of the concepts, as translated here, will be kept in their given order so to render the message as close as possible to the original source.

Ye, I would ask the reader to understand Siva as God, and to formalize this perception in the way necessary for the understanding, furthermore, only Kashmir Saivism's perspective will be discussed here.

To start with, I will go back to the beginning, as described in the stanzas of 129 hymn of *Rgveda* "Darkness was in the beginning hidden by darkness; indistinguishable, this all was water. That which, coming into being, was covered with the void, that One arose through the power of heat. Desire in the beginning came upon that, (desire) that was the first seed of mind. Sages seeking in their hearts with wisdom found out the bond of the existent in the non-existent[1]". The darkness of the beginning will highlight the light of the consciousness.

That *desire* is rendered as *love* in a very poetical translation of the whole hymn, and *that One* as *intelligence*[2]. Later on, the Kashmiri Saivists texts will connote *desire* as *the creative impulse in its subtle manifestation*; and *wisdom* and the *bond of the existent in the non-existent* as the *consciousness* itself in its different phases of the manifestation process.

Abhinavagupta clarifies "[The word] Consciousness is an abstract noun that expresses the concept of freedom, that is, [Absolute] Being beyond all specification"[3]. The diverse schools of Kashmir Saivism portray the consciousness as Siva, Light, Self, Absolute, Recognition, Spanda, and it is all that.

One of the basic texts of Kashmiri Saivism, the *Siva Sutra* – called so for being transmitted by Siva himself to the sage Vasugupta during sleep – is divided into separate parts called 'Lights'[4]. Not completely metaphorically, these Lights ascend to reveal, illuminate, and lead the path of the enlightened consciousness, which defines the adept on the path as the enlightened *yogi*.

As already elucidated elsewhere[5], "There is more to this metaphor to the dream […] Vasugupta the sage dreams and a sequence of transcendent truths comes to light. That which is Siva, the Absolute light of Consciousness, reveals itself to him in these aphorisms."

More than a metaphor it is in a dream – a state in which the senses are withdrawn from the external perceptions – where Vasugupta receives the messages and the universal truth is revealed, namely, inside. And in this inside, at the backstage of the phenomenal reality, Siva is creating his masterpiece, the Universe.

The Ultimate reality is the Supreme consciousness and a Supreme spiritual energy, both transcendental and immanent. The First Sutra of the *Siva Sutra*[6] states *"Consciousness Self"* (*caitanyamatma)*, where Self is consciousness turning into itself. No comments shall I attach to this text and leave it as pure as it is, but I will specify the nuance of understanding of the Self. The nature of the Self is consciousness with its aspects of will, knowledge, and action, where knowledge is an action as well as will is knowledge.

Kashmiri Saivism maintains that the reality is universal egoity, which comes into being by the awareness of "I am" as a reflection of the pure "I" consciousness. The Self is unrelated to the ego that turns us in temporal dependence with its relations and ambitions. This "I" consciousness is infinite, subtle, pure and free, and the Self is its reflection. "God, Who is Himself this pure 'I am', but actively creates, sustains and withdraws all things in and trough its perception of them and itself"[7].

At a macrocosmic level the consciousness is pure Being, with no specifications, the Absolute itself. At a microcosmic level, it is a reflective awareness of the Absolute. That awareness is knowledge. "In short, consciousness is known by being conscious. Nothing can obscure it. It is free of all means (*anupaya*) and self-illuminating (*svaprakasa*)"[8].

Knowledge is bondage (jnanam bandhah) reads the text of the Second Sutra. "The Divine, our true nature, our 'own Being', is light. Its realization is therefore a powerful vision of light, expanding and unfolding as all things. To realize this is to acquire 'Pure Knowledge'[9] clarifies Bhaskara in his commentaries on the *Siva Sutra*.

Knowledge in this pure sense is the reflective awareness of a compact unity with the Absolute, unity of the ultimate consciousness with the Self, pure undivided Being.

At a very subtle level, this Self-awareness *(vimarsa)* is the knowledge and the action of the Absolute, and, at the grosser level, is the manifestation or the world-process; thus *vimarsa* is the power of doership of Siva, and the Eternal light *(prakasa)* is Siva without which nothing can appear.

In the texts of the Pratyabhijna school (Philosophy of Recognition), the light of consciousness is named *sphuratta,* a 'radiant pulse', consistent with the *spanda* of the Spanda schools. "The very *vimarsa*, the very *iccha* (will) of the Divine is spiritual energy of incalculable force that can be proliferate into any form from the subtlest to the grossest"[10].

Knowledge is a very fragile term for the *Second Sutra*, not to be perceived as a limited knowledge giving notions as "I" and "this is mine".

The knowledge of that lower order gives rise to the impurity of individuality *(anavamala)*, breaking the consciousness of the Self true nature in two ways: "as a loss of Consciousness of one's freedom, and loss of freedom of one's Consciousness"[11]; the impurity of Maya *(mayiyamala)* engenders the sense of duality, of the separation of the perceiving subject from the perceived object; and the impurity of Karma/action *(karmamala)* binds us to the fruits of our actions.

Knowledge obtained by the perceptions of the senses is a product of the ego, of the intellect and of the mind. As a result of this limited knowledge, the Self identifies with the psycho-physical body and, therefore, falsely perceives the reality differentiated, losing the connection with the true universal nature.

To grasp the unfolding process of creation, an introduced to its main principle *Spanda* – the Divine creative pulsation, the throb of the universal consciousness, the spiritual dynamism, and the movement without motion – is needed. In Abhinavagupta plain words: "By 'vibration' *(spandana)* [we mean] subtle movement. It is subtle [in the sense that] although it moves not, it manifests as motion. The light of Consciousness is not at all separate [from manifestation] yet it appears to be so. Thus, that which is immobile associated with the variety of manifestation, manifests [as movement][12]."

Spanda is the three-fold throb of the consciousness, as will, knowledge, and action, which cause the emergence of all objects externally and within the field of awareness. It is another name for Self-awareness. "Kashmiri Saivism maintains that all things are spontaneously emanated by consciousness in such a way

that the original source of the emitted product remains unchanged and one with the emanation[13]." Therefore the Universe is the body of the consciousness. "Consciousness is essentially active. Full of the vibration of its own energy engaged in the act of perception, it manifests itself externally as its own object. When the act of perception is over, consciousness reabsorbs the object and turns in on itself to resume its undifferentiated inner nature[14]."

The dynamic *spanda* character of the ultimate consciousness is its freedom to assume any form by will, aligning its awareness in the space-time reality and, by he same token, remaining undivided by its very nature. It is a stage of diversity in unity. At the subtle level, the Divine consciousness stays in perfect compact unity, while only the perception of the difference between perceiver and perceived makes the diversification possible. Actually, Being and Becoming are the two aspects of the consciousness – the inner and the outer. "[A]ccording to the Kashmir Saivism *Maya* is the power of the Absolute to appear in diverse forms. The separation between subject and object is the product of a creative act and not an illusion[15]".

Hence, the process of creation is one, yet perceptions make it different. When the consciousness is spontaneously expressing itself as a manifestation, without losing the essential nature of unity, there is the experience of the pure *spanda*; whereas, when the manifestation is perceived as a process of differentiation and separation, it is under the influence of delusion of *Maya*. "The creative freedom of the Absolute *svatantrya* and its deluding power of *Maya* are identical[16]". In the field of the Supreme consciousness, the inner and outer realities are one. Maya operates as a delusion when the perception of the reality is a result of the conditioning and limiting energies of perception.

Of relevance is mentioning that the creation process is the 'descent' of the consciousness from the subtle level of the Absolute unity to the gross level of the diversified reality. In the Kashmir Saivists texts, the ascent process is so conceived: "The two phases of the pulsation of consciousness from inner to outer and from outer to inner are equivalent […] They represent the sequence of descent into matter and ascent into consciousness[17]" *(Tantraloka).* To this regard, the consciousness is moving down to the conditioned state, and up to the state of complete freedom.

In these texts, the seeker of truth, of light, and the link with God is termed '*enlightened*' and '*yogi*', where *yoga* is taken in the 'union' acceptation. The goal of *yoga* is the awareness and realization of the true divine nature, and to abide there in universal union. Liberation *(moksa)* is the awareness and knowledge of one's true nature. The ascent is the way back to the ultimate source, to the supreme reality of unity, and to merger back with the universal consciousness. As the descent is a pulse downward, likewise the ascent is a pulse upward, both part of the same S*panda* principle that emanates the Universe, and that reabsorbs it. The way consists in residing in the *Spanda* and, by unveiling the real divine nature, to get enlightened and free. *Spanda* is identical with the Self, as well as with the whole Universe, and the focus of each individual is to feel this identity with the Universe. Thanks to its *Sahaja vidya* aspect – a state in which, by virtue of identity with the Supreme consciousness, the feeling of difference of the diverse aspects of reality coalesce in a sense of unity – *Spanda* makes it possible to feel the unity in the middle of diversity. This amounts too getting enlightened or absorbed in the universal light of the Supreme consciousness.

Centuries back, Abhinavagupta offered a profound message, still topical nowadays: "People, occupied as they are with their own affairs, normally do nothing for others. The activities of those in whom every stain of phenomenal existence has been destroyed and are identified with Bhairava, full of Him, are intended only for the benefits of the world[18]". We are living in a time of change at the level of consciousness, in a time when consciousness is becoming collectively self-conscious, and a vast shift, a renewal in which transformation and transmutation are taking place. According to the Kashmiri Saivism texts, the Absolute emanates and reabsorbs everything; hence the supreme state is a state of unity, and enlightenment is the experiential merge in the flowing from diversity to unity, and get knowledgeable of the true nature of the Self and of the Universe.

"The point is that when one reflects that the Universe, consisting of the powers of knowledge and action, is not separate from the Absolute *(anuttara)*, which is both the light and reflective awareness [of Consciousness], it dissolves away, fusing with Siva's [divine] fire of supreme Consciousness[19]". "From the yogic perspective, consciousness is a continuous evolutionary process in which become more and more aware of our internal spiritual nature[20]". Thus, the evolution/expansion of consciousness is not an ordinary subject of education; rather it consists in the education to values, significance and ways of living and understanding life, brief, education of goodness.

The time has come when isn't any longer tolerable to merely understand what is happening, it is rather a time compelling to apply the acquired knowledge to Change, to increase the level of social responsibility, and to operate as part of a whole. The geo-political

propensity to unite and function in larger social groups is a collective consciousness evolutionary bent. Yet, how to adjust its content to the path of oneness? The contemporary lane to enlightenment might well transit across the philosophical and scientific inquiry – rather than through a religious pursue – where spirituality, the content of any religion, deems to be regarded as a self-study and a personal relation with God/Universe. Collective consciousness is a state available through intuitive awareness, accessible once the delusive sense of individuality has loosened off. Searching and inquiring for truth, love, goodness and values of life is consciousness' natural insight and expansion.

To discontinue seeing the phenomena as human and non-human, and perceiving them as God, and God in each of us, transmutes doubt and distrust in confidence, and selfishness in inclusive altruism. Unity with the Universe and God informs knowledge on how to inhabit the world and to control it, provides mastery over being one with the Self and the Universe. Which, in turn, gives rise to the significance of the efforts of the personal Self to think and live and, accordingly, to act as a part of the whole.

As a matter of fact, the ocean of collective consciousness described in the *Rgveda*, is an ocean in which each individual is a wave that, despite of being raised, moved, and growing, is still, at all the time part of it, without beginning and ending.

"The great secret of growth is: whatever level of development we have reached, we must keep on growing[21]."

Please don't take it personally, rather as a part of the whole. Let's see the Absolute freedom everywhere.

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[1] Macdonell A.A., Oldenberg H., Max Muller F., *The Golden Book of the Holy Vedas*: 28. Creation: 193-198 (Delhi: Vijay Goel).

[2] I*bidem*. Introduction.

[3] Dyczkowski M.S.G, *The Aphorisms of Siva:* 14 (Varanasi: Indica Books, 1998).

[4] *Ibidem*.

[5] *Ibidem*: xi.

[6] *Ibidem*:13.

[7] *Ibidem*: 3.

[8] *Ibidem*: 14.

[9] *Ibidem*: 6.

[10] Singh Jaideva, *Siva Sutras*: xx (Delhi: Molital Banarsidass, 1988).

[11] Lise Vail, Bansi Pandit, *Ishvarapratyabhijnakarika of Utpaladeva:* 3/2/4-5 (Delhi: Molital Banarsidass, 2003).

[12] See Dyczkowski M.S.G, *The Doctrine of Vibration:* 49 (New York: University of New York Press, 1987), for Abhinavagupta, *Ishvarapratyabhijnavimarsini*: 208-9.

[13] Dyczkowski M.S.G, *The Doctrine of Vibration:* 87 (New York: University of New York Press, 1987).

[14] *Ibidem*: 49.

[15] *Ibidem*: 70.

[16] *Ibidem*: 79.

[17] See Dyczkowski M.S.G, *The Doctrine of Vibration*: 89; for Abhinavagupta, *Tantraloka*: 4/167a.

[18] See Dyczkowski M.S.G, *The Aphorisms of Siva*: 8; for Abhinavagupta, *Tantraloka*: 2/39.

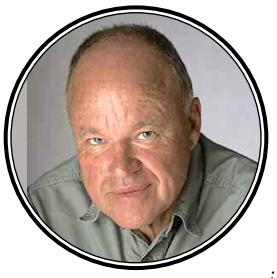
[19] Dyczkowski M.S.G, *The Aphorisms of Siva*: 24.

[20] Swami Niranjananda Saraswati, *Yoga magazine* (Ganga Darshan, 2007).

[21] Dyczkowski M.S.G, *The Aphorisms of Siva*: 8.

JOHN E. STEWART

ENLIGHTENMENT
AND THE EVOLUTION OF MATTER



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INTRODUCTION

What is the significance of individual and collective enlightenment to the future evolution of humanity on this planet and in the universe more generally? How important are capacities enabled by enlightenment to the evolutionary survivability and success of humanity? Will the processes of cultural evolution in the material world drive the development and spread of enlightenment and associated capacities amongst humans in the future? (This article is premised on the obvious point that if enlightenment is to develop and spread, it will be through cultural evolutionary processes, not through gene-based biological processes.)

To date, states and experiences associated with enlightenment seem to have emerged in very many human cultures[1]. However, in any given culture, very few individuals have had these experiences. Furthermore, in the limited cases where enlightenment has emerged, it does not appear to have had significant adaptive or evolutionary consequences. But is this likely to change as the evolution of humanity and life continues to unfold on this planet? Will capacities enabled by enlightenment eventually produce major adaptive advantages for individuals and organisations?

In order to answer this question, it is first necessary to develop a clearer understanding of the nature of enlightenment and its potential to enable superior adaptive capacities. This is not a simple task because experiences associated with enlightenment have been described and interpreted very differently across cultures and religious groupings. Humans have demonstrated an almost unlimited capacity to devise different religious and supernatural explanations of spiritual phenomenon, and many religious and spiritual traditions seem to have developed a different interpretation of enlightenment and related phenomena. Many of these contradict each other. However, despite the enormous diversity of these explanations of enlightenment, it is possible to find deeper commonalities. Although the interpretations differ, it is clear that the actual experiences underlying the disparate interpretations are very similar[2]. It is these deeper commonalities amongst experiences of enlightenment that I will examine in this article.

I will focus on two capacities that many religious and spiritual traditions seem to be pointing to when they are attempting to describe enlightenment experiences. The first is a capacity to free oneself from the dictates of one's biological and cultural past, including from one's up-bringing[3]. This includes the freedom to act contrary to one's instincts and other hereditary pre-dispositions as well as contrary to one's social and cultural conditioning (including pre-dispositions that are shaped by a combination of these factors). Most religious and spiritual traditions promote the acquisition of capacities that provide a degree of freedom from an individual's biological and cultural past, although they don't describe or interpret the capacities in those particular terms. Examples include the ability to 'resist temptation' and 'turn the other cheek' (Christianity), to free oneself from all desires (Buddhism), to experience equanimity in the face of pleasure or pain (Hinduism), and to transcend the self-centred desires and grasping that underpin ego. I will refer to this general capacity to free oneself from one's desires and motivations as 'self-evolution'. This is because it frees an individual to change their goals so that they are aligned with future evolutionary success.

The second capacity I will examine is the ability to develop mental models of one's interactions with complex environments, and to use these models to identify the particular actions that will be most advantageous in evolutionary terms. Such an ability

to foresee the complex social and environmental consequences of alternative actions is often referred to as wisdom. The spiritual and religious traditions commonly associate enlightenment with a capacity for deep wisdom, particularly in relation to complex social and environmental systems. I will refer to this capacity as 'meta-systemic wisdom[4]'.

THE NATURE OF ENLIGHTENMENT

Before I move on to identify the adaptive significance of these two capacities, I will briefly show how they are consistent with a general understanding of enlightenment. I will show that this is the case from the perspective of modern developmental psychology as well as from the perspective of the religious and spiritual traditions. Most traditions seem to agree that in the enlightened state, all contents of consciousness arise as what I will refer to as *objects* in consciousness (contents of consciousness include thoughts, images, emotions, feelings, desires, sensations, etc.). Contents that arise as *objects* in consciousness are experienced in the way we currently experience many objects in the external world – i.e. we are free to move attention to them or away from them at any time, and they do not control or dictate our behaviours[5]. The traditions have used various terms to describe conscious contents that are experienced as objects in the sense I am using here. For example, they may say that at enlightenment, there is no attachment to, identification with, embeddedness in, or absorption in any of the contents of consciousness[6]. When a tradition states that an individual is not attached to a particular feeling, they are pointing to a feeling that I am referring to as an object.

It is of great significance that conscious contents that are objects of consciousness do not automatically control our behaviour. For example, if an emotion arises that we are not identified with or attached to, the emotion does not dictate our behaviour. It can arise, be noticed, and then dissipate without influencing our actions, if we so choose. We can freely choose to act in ways that are wiser and more appropriate than if the emotion dictated our behaviour. In contrast, if we are attached to or identified with an emotion that arises, it will influence our behaviour and we will not have a capacity to act more wisely.

An individual has the potential to use any of the resources of mind to evaluate the relevance of objects of consciousness when choosing between behavioural alternatives. This includes recruiting various mental, emotional, intuition and other resources, irrespective of where they are located in the brain (according to the most widely accepted model of how consciousness functions [Global Workspace Theory], the central function of consciousness is this ability to recruit relevant resources from throughout the brain[7]).

While they are held in awareness as objects that we are not identified with, contents of consciousness are given only 'bare attention'. As a consequence, they use little of the very restricted 'band width' of consciousness (despite how we sometimes interpret out subjective experience, consciousness has been shown to have limited capacity [it processes contents serially and relatively slowly[8]]. Its capacity can, for example, be fully loaded for an extended period by a single sequence of thoughts. This is consistent with common experience: when we think deeply about a particular issue, the rest of the world disappears from conscious awareness).

Bringing these key elements together, it is easy to see the significance of non-attachment and non-identification in relation to the contents of consciousness. Firstly, these 'techniques' are ways of 'working around' the limited capacity of consciousness: they enable a much greater range of representations to be held in bare attention and to be used in the recruitment of relevant resources when it is adaptively advantageous to do so[9]. As a consequence, the 'spaciousness' of awareness is a key characteristic of the enlightened experience.

Secondly, and more importantly in the context of self-evolution, objects of consciousness do not dictate our behaviour. Non-identification enables radical psychological freedom. It gives us some psychological distance from our thoughts, motivations, emotions and other objects of consciousness, and enables us to move at right angles to them. Objects of consciousness are not experienced as elements of one's subject that control the subject[10].

As developmental psychologists have pointed out, when individuals grow and develop, more becomes an object of consciousness, and less becomes part of the subject. As the psychologist Robert Kegan has shown, key steps in vertical development occurs when elements that were part of the subject at an earlier stage in development becomes object to a new subject at the next developmental stage[11]. For example, at later stages of development, an individual *has* emotions, while at earlier stages the emotions *have* the individual. Emotions and other pre-dispositions that previously dictated behaviour no longer do so, enabling us to choose to act differently where this is appropriate.

This movement from subject to object during the development of individuals also applies during the evolution of humanity. As humans have evolved, more and more has become object. As a consequence,

humans have increasingly achieved greater psychological freedom. But this trend is far from complete. The movement from subject to object will end when the distinction between subject and object breaks down because all can be experienced as object. In this state, objects within consciousness are no longer experienced as if by a subject who has a specific location or perspective. Elements that might previously have been experienced as part of the self are not experienced differently to other objects any longer, and vice versa. In such a state, individuals will not experience their self as the origin or source of consciousness. For example, it might not be immediately obvious to an individual in this state whether she is looking at the knobs on a chest of drawers or vice versa. These observations are consistent with the central descriptions of the enlightened experience given by the traditions: all is experienced as one; there is no distinction between subject or objects. It is also consistent with the model of the enlightened state sketched by philosopher Thomas Metzinger: he suggests that the contents of consciousness are no longer experienced from a specific perspective once the individual can disidentify with what he calls the Phenomenal Model of the Intentionality Relation (PMIR) and the Phenomenal Self-Model (PSM)[12].

The key features of enlightenment that I have sketched here are capable of enabling the development of the two capacities that are the focus of this article. The movement of emotions and other predispositions from subject to object and the individual's dis-identification from them can free the individual from their dictates, and enable the individual to choose to move at right angles to them. Furthermore, the ability to treat thought as object and to freely disengage attention from it enables the individual to free herself from the limitations of logical, analytical, linear thinking. It enables her to direct attention to aspects of reality that are generally missed by such thought. This in turn enables the individual to build and use mental models that include the aspects that are not adequately modelled by analytical/rational thinking.

THE EVOLUTIONARY SIGNIFICANCE OF SELF-EVOLUTION

How significant are these two capacities to the future evolutionary success of humans and collectives of humans? What evolutionary advantages can they provide? I will begin by considering the capacity for self-evolution. Human emotions, desires and other pre-dispositions establish the goals of human behaviour. These per-dispositions were initially established and shaped by gene-based evolutionary processes. In essence, humans were programmed by these processes to pursue internal rewards (and avoid internal 'punishment') so that they behaved in ways that were successful in the evolutionary environments that they encountered[13]. Learning and culture have since become far more significant in shaping the nature of the particular behaviours that humans adopt to satisfy their internal reward system. And Pavlovian classical conditioning can extend particular emotional responses to circumstances that would not have originally elicited them. But humans still have little capacity to consciously and intentionally change the nature of their internal reward system. They do not choose the specific things that they like or what they dislike. For example, many individuals have a limited ability to choose whether they will crave fatty foods. Nor can they choose to feel motivated and energized to take particular actions merely because the actions are likely to benefit the future evolution of humanity. Cross-culturally, humans tend to pursue the same kinds of goals shaped by their internal reward system, even though the actual behaviours they use to achieve their goals may differ widely. Whatever our cultural background, and irrespective of whether we were born 30,000 years ago or this century, we spend our lives chasing the positive feelings produced by popularity, self-esteem, sex, feelings of uniqueness, power, food, and social status. And we strive to avoid the negative feelings that go with experiences such as stress, guilt, depression, loneliness, hunger, and shame. It is clear that individuals currently do not have the same capacity to change their internal reward and emotional system as they have to change their actions and behaviours.

The substantial evolutionary advantages that can accrue to individuals who are able to self-adapt and self-evolve their internal reward system are obvious: unlike individuals without this capacity whose reward system has been shaped by past evolutionary needs, they can choose to align their reward system with current and future needs[14]. Where circumstances have changed, there is no guarantee that what worked during our evolutionary past will also be optimal for our evolutionary future. For example, the circumstances faced by human tribal systems 30,000 years ago are vastly different to those facing modern civilizations. For this reason, it is very common to find miss-matches between the behaviours rewarded by our emotional systems and the behaviours that are optimal for the future success of humanity. What is needed to rectify these miss-matches is a capacity to align one's internal reward system with what is

required for our current and future survival and evolutionary success. This would ensure that whatever is demanded by our evolutionary future will be satisfying and motivating to the individual. A capacity for self-evolution would be clearly superior in evolutionary terms. Individuals who have an enlightenment-enabled capacity for self-evolution can be expected to contribute substantially more to the evolutionary success of humanity than those who do not.

The same applies to collectives of humans, including societies. In order to achieve future evolutionary success, they too need to be self-evolving. They need to ensure that whatever their members need to do for the evolutionary success of the society is rewarded and motivated appropriately. This will align the interests of all members of the society (including any instances of artificial life and other technology) with the interests of the society as a whole. This in turn will ensure that all participants in the society (including individuals, firms, corporations, political groups and governments) will, when they follow their own immediate interests, also act in the interests of the society[15]. The presence of self-evolving individuals in a society will be critically important if such self-evolving societies are to be organised and emerge. This is because individuals who are able to align their reward system with the future evolutionary needs of their society are likely to be motivated to establish self-evolving societies, and those who are unable to are not. Of course, self-evolving individuals will need to gain sufficient power within the society if they are to re-organise it into a self-evolving society. We will return to this issue below.

Of course, individuals and societies that have transcended their evolutionary past are free to choose to align their internal reward system with goals that will not lead to the evolutionary success of humanity. However, there are strong reasons why they will tend to choose to align with evolutionary goals. This is because evolutionary goals are those that are needed to guarantee continued survival of humanity indefinitely into the future. If humanity is 'selected-out' of existence by larger scale evolutionary processes at any time in the future, all the actions of human individuals and societies up to that point will have come to nothing. They will be rendered irrelevant, futile and without meaning. The only chance that an individual or society has to contribute to something that can survive and thrive into the future is by aligning their goals with evolutionary goals. This issue is considered in much greater detail in The Evolutionary Manifesto[16].

THE EVOLUTIONARY SIGNIFICANCE OF META-SYSTEMIC WISDOM

The evolutionary advantages of what I have referred to as meta-systemic wisdom are equally significant. If individuals and organisations are to achieve evolutionary success, appropriate goals are not enough. They also need intelligence – i.e. they need to be able work out what particular actions and behaviours will be needed to achieve their evolutionary goals. As we shall see, the current highest level of cognitive intelligence that is relatively common amongst humans is not very effective for this purpose. This level (which I shall refer to here as 'analytical/rational thinking') first began to spread amongst significant numbers of humans with the emergence of the European Enlightenment about 400 years ago. Analytical/rational thinking was a major advance beyond previous kinds of human thought. It enabled the emergence of science, machines and other technologies, systematic planning and strategic thinking. It fundamentally changed the nature of the human-built world.

Broadly, analytical/rational thought attempts to model a particular phenomenon by reducing it to the interaction of a number of objects. The objects are each assumed to have fixed attributes and interact according to defined rules (laws). The collection of objects comprises a closed system that is largely unaffected by events outside it. If these conditions are met, logical thought can predict how the system will unfold by using the rules to calculate the outcomes of sequences of interactions.

This approach to modelling reality can be very effective for understanding those parts of the world that happen to work like the model. It is successful for phenomena that can be adequately represented by such simple, mechanistic models. Once the laws or rules of interaction have been discovered and the relevant objects and their attributes identified, analytical/rational thinking can predict how these parts of the world will unfold. And it can tell us how those parts of the world can be re-arranged in ways that help us to achieve our goals.

However, it is easy to see where this logical, analytical thinking will fail to model complex aspects of reality. In order to find parts of the world which are simple enough for it to model, analytical thinking generally has to focus down on particular isolated phenomena, and ignore the complex, multi-layered context in which all phenomena are embedded. It then has to attempt to represent the phenomena by building a simple, mechanistic, reductionist model that linear thought is capable of 'thinking through' and tracking. The

more complex the system of objects and their interactions, the harder it is for analytical thought to keep track of all the sequences of interactions. Difficulty turns into impossibility for systems where circular chains of cause and effect are common i.e. where the effects of an object on other objects eventually feedback to impact on the original object itself.

As a consequence, analytical/rational thinking enables us to understand and manipulate only those aspects of reality that are mechanistic and relatively simple. Unfortunately, most of the natural world is not simple and analysable. As a consequence, mental models built with analytical/rational thinking cannot adequately reflect most of reality, the majority of which is complex and ceaselessly changing[17].

Consistent with these limitations, science based on analytical/rational thinking has been very poor at understanding our complex social and economic systems and enabling us to manage them effectively. Scientific psychology has provided only simple and trivial insights into how our minds actually work. And the mismatch between linear, scientific thinking and the complex ecosystems that constitute our natural environment is threatening our existence: scientific ecology has proven unable to understand and predict the complex impacts of our actions on the natural world.

The first major step towards building complex mental models that can handle the complexity of much of the real world is to be able to dis-engage from analytical/rational thinking and see it as object. This in turn enables an individual to see the limitations of analytic thinking and how they can be overcome. It enables the identification of those aspects of reality that are left out by reductionist, linear thought. Individuals can then freely move dis-engaged attention to aspects of reality that are missed by analytical thought, thereby enabling the recruitment of resources to build mental models of those aspects[18].

Furthermore, complex thinking requires access to pattern-recognition capacities and intuitional resources that are capable of building mental representations of complex processes. The ability to dis-engage from analytical/rational thinking is also the first step towards developing this capacity. It enables an individual mentally to stand outside their thinking, and give their thinking only bare attention. This in turn frees the limited bandwidth of conscious attention to recruit other resources that are more effective for building mental models of complex reality. These include intuition and pattern-recognition capabilities[19].

Meta-systemic wisdom is far more effective than analytical thinking at achieving goals in complex circumstances in all areas of human existence, including family relations, politics, social issues, environmental challenges, economic crises, and so on. However, it is the advantages that it provides to business executives that are likely to be a major factor in spreading the capacity rapidly across modern societies. Any innovation that provides a competitive edge for business will rapidly attract interest, resources and funding. For all its failings, our economic system can be very effective at finding and amplifying innovations that assist corporations and other businesses to achieve their goals. And it is clear that meta-systemic wisdom can provide a strong competitive advantage: the business conditions encountered by senior executives in major corporations are already demanding that they develop effective mental models of their complex, ever-changing business environments. Very few executives can yet meet these demands. Nearly all are floundering and failing. They are flying by the seats of their pants and pretending that they know what they are doing. In these circumstances, once some businesses discover that their executives can be trained and coached in complex thinking, their competitors will have to quickly follow suit or be left behind. In this way our economic system can drive the spread of the new level of thinking that is needed to overcome the problems that the economic system has helped create and has often exacerbated.

If human societies are also to be capable of building models that they can use to identify the actions that will enable them to achieve evolutionary goals, they too will need to develop a capacity for meta-systemic wisdom. In order to do this, they will need to contain sufficient numbers of individuals and artificial intelligences that have this capacity. Once humanity forms a unified and cooperative global society, these meta-systemic thinkers will operate collectively as a global consciousness. Metaphorically, enlightened individuals who have developed a capacity for meta-systemic wisdom can become cells in the brain of the planetary society[20].

Once sufficient numbers of these advanced individuals have emerged to control the planetary society, they will propel the society into an extensive period of self-development and individuation[21]. To guide its development, the global society will build models of its future evolutionary potentials. It will develop the capacity to use these models to adapt itself both internally and externally. And in order to implement the actions and plans identified by its models, the global society will develop the ability to adapt coherently as a whole.

In particular the global society will develop the capacity to move, to expand its scale to that of the

solar system and then to the galaxy and beyond, to remodel its physical environment, to have physical impacts on events outside itself, to form intentions, to establish projects and long-term objectives for the organization, to communicate and interact with any other living processes that it encounters, to amalgamate with other societies of living processes to form larger-scale cooperative organizations, and to do any other thing that might advance the evolutionary process in the future.

The development by the global society of a capacity to act, adapt and relate as a coherent whole would be a very significant step in the evolution of life on this planet. It would mean that life on Earth could speak with one voice. For the first time, there will be an entity that is at the same level as other planetary and trans-planetary societies. At last an entity will exist that other planetary societies can relate to without fear of distorting our development.

If life on Earth develops itself to this level, the universe will benefit from the unique perspectives, passions and talents that Earth life can bring to it. Just as each of us has the potential to be a cell in the brain of the planet, humanity can become a cell in the brain of the universe. A whole new universe of possibilities will open up to humanity.

CONCLUSION

The acquisition of capacities enabled by enlightenment such as self-evolution and meta-systemic wisdom is likely to be critically important for all sentient organisms and their organizations wherever they evolve in the universe. All sentient organisms will need to free themselves from the constraints of their biological and social past so that they can serve the interests of current and future evolution. They will need to be able to self-evolve so that they can re-make and adapt all psychological and other aspects of themselves as external evolutionary circumstances change. And as sentient organisms develop higher intelligence, they will need to use it to revise and enhance their existing adaptations that were originally developed with lower levels of intelligence. All sentient organisms will also need to overcome the limitations of analytical/rational thought (analytical thinking is always likely to emerge first before more complex forms of thought because of its relative simplicity). This is because the overwhelmingly majority of naturally occurring phenomenon are complex and cannot be modelled adequately by analytical/rational thinking. Many of the structures and processes on this planet that are mechanistic enough to be understood by analytical/rational thinking have been constructed and designed by humans who are limited to analytical/rational thought.

Fortunately for life on this planet, the religious and spiritual traditions contain extensive knowledge about enlightenment. The traditions have passed down across many generations various practices and other techniques that individuals can use to work on themselves to attain enlightenment (arguably the story of Noah's Ark can be seen as an allegory about passing on these techniques through isolated monasteries [Arks] in the face of almost continual warfare [the deluge])[22]. Many of the practices developed by the traditions use techniques such as meditation which typically incorporate a common process: they require the individual to practice dis-engaging from and letting go of thoughts and emotions so that they can become objects of consciousness[23].

However, it is worth emphasizing here that the attainment of 'classical' enlightenment alone does not provide an individual with the capacities for self-evolution and meta-systemic wisdom. It greatly facilitates their development, but is not itself sufficient to establish them. Nearly all approaches to attaining enlightenment include techniques for the development of capacities for dis-identification and for freedom from control by thought, emotions and desires. But few go on to provide detailed guidance about how these capacities can be used to re-make one's self psychologically in order to be more effective in the material world. They rarely focus on the development of self-mastery for the specific purpose of enhancing an individual's capacities to actively intervene in human affairs in order to control them. The emphasis of the traditions is mostly on communion rather than agency, and their ultimate goals are often 'other worldly'. Furthermore, no traditions that I know of go on to advocate that individuals should remake themselves psychologically for the specific purpose of aligning their goals with the evolutionary interests of humanity. Classical enlightenment is an important step towards the development of capacities that are needed to actively advance the evolutionary process. But from an evolutionary perspective, classical enlightenment is a means to an end, not an end in itself[24].

It is clear why the versions of enlightenment that have survived until the present are not ones that promote the development of self-mastery and its use to influence worldly affairs. Versions that produced enlightened self-mastery would be likely to be a threat to ruling powers and would be suppressed by rulers who did not have access to them. And the strategy of aligning with a winning side would be unlikely

to work in a world where every habitable area has been regularly subject to war and where ruling powers regularly come and go. This points to a critically-important challenge for individuals who intentionally want to contribute to advancing the evolutionary process in relation to this issue at this time. The practices used by the religious and spiritual traditions need to be adapted and modified in order to develop techniques that produce enlightened self-mastery. This will include stripping from these practices their supernatural, non-scientific, and mystical content. The result will be techniques and practices that are primarily science based.

In comparison to the knowledge that humanity has accumulated about how to develop enlightenment in individuals, humanity has significantly less knowledge about how to organise a planetary society that will be self-evolving and capable of meta-systemic wisdom. But as mentioned above, a first step towards such a society would be to develop these capacities amongst sufficient numbers of individuals and ensure they have the power to shape the future evolution of the society. This would enable these individuals to promote the continued development and individuation of a global society. The processes needed to produce an enlightened global society have some similarities to the processes that are necessary to re-organise the human mind to produce individual enlightenment. As Marvin Minsky pointed out, our mind is actually a large society of simpler processes that each undertakes specialized tasks[25]. In terms of his model, practices that produce individual enlightenment re-organise the individual's society of mind. The practices create and empower elements within an individual's mind that can contribute cooperatively to the emergence of dis-identification, mindfulness and related capacities. A planetary society will also need to be re-organised to create and empower individuals and organisations who can cooperatively enable self-evolution, meta-systemic wisdom and related capacities. As below, also above. At all levels, enlightenment is a collective, cooperative process.

♦

[1] Wilber 1989, *The spectrum of consciousness.*

[2] Wilber 2007, *Integral spirituality.*

[3] Stewart 2000, *Evolution's Arrow.*

[4] Stewart and Wilding 2013, *Materials and Practices for Developing Higher Psychological Capacities.*

[5] Kegan, 1989, *The Evolving Self.*

[6] Stewart 2007, *The Future Evolution of Consciousness.*

[7] Baars 1997, *Inside the Theatre of Consciousness.*

[8] Miller 1956, *The magical number seven, plus or minus two.*

[9] Stewart 2007, *op. cit.*

[10] Kegan 1989, *op. cit.*

[11] *Ibidem.*

[12] Metzinger 2006, *Being no one.*

[13] Frank 1988, *Passions Within Reason.*

[14] Stewart 2001, *Future Psychological Evolution.*

[15] Stewart 2000, *op. cit.*

[16] *Stewart* 2008, *The Evolutionary Manifesto.*

[17] Laske 2008, *Measuring hidden dimensions of human systems.*

[18] Stewart 2016, Review of Book: *Dialectical Thinking for Integral Leaders.*

[19] *Ibidem.*

[20] Russell 1982, *The Awakening Earth.*

[21] Stewart 2008, *op. cit.*

[22] Nicoll 1956, *Psychological Commentaries on the Teachings of Gurdjieff and Ouspensky Volume 5.*

[23] Stewart 2007, *op. cit.*

[24] *Ibidem.*

[25] Minsky 1986, *The Society of Mind.*

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FRED MATSER

MY PROCESS OF 'DE-VELOPING' CONSCIOUSNESS

FROM FINITE 'UNDERSTANDING' TOWARDS GLIMPSES OF INFINITY

Fred Matser is an ex property developer and a humanitarian who during the last 35 years is active as a full-time volunteer in the field empowering people in the context of a sustainable environment. His work has impacted the lives of thousands of people through 19 foundations in 52 countries.

We have all been born. / One day we all will die.
In the meantime, we've been given the gift of life
in order to live together, in harmony.

♦

DEAR READER, I AM AWARE THAT WHEN YOU READ this article you will automatically associate what you read with your past experiences and (scientific) knowledge, interpreting my words on that basis. I do just the same. Nonetheless, my invitation to you is to let go as much as possible of what you (scientifically) know and join me in going over the edges of our belief systems; of that which we have accepted as the so-called normal or the so-called 'truth'.

INTRODUCTION

First of all, notice that this article is a personal perspective on 'collective enlightenment', not a scientific one. Scientists are trained to look at our existence, being part of relativity, as an 'objective' given. In this article, I will make an effort to explain sources of 'in-formation' that are available to us, which science excludes by its own limiting rules. My goal is to help us attain a different, individual, and maybe collective state of consciousness by experiencing the presence of unconditional love. Maybe this is what Enlightenment means. When such an experience is attained, it can help us act more from love and less from fear. The key may be to learn to trust (!) not only the products of our mental faculty but the other sources of information available to us as well, such as our feelings and intuitive faculties. Based on my own experiences, insights and reflections, I will speculate on how reality may work. Given the limited length of this article, I've chosen to focus only on specific inroads into the topic at hand, which means that I will be neither complete nor nuanced.

HOW MY STORY STARTED: CONSCIOUSNESS LIMITED TO THINKING

Let me share a little bit of my life story so that you can get acquainted with me a little. In the Netherlands, in the spring of 1945, on the cusp of peace after years of war, my mother gave birth to me. Eleven months after my birth, tragedy struck. My older brother, Bob, who was only four years old, died due to congenital heart problems. I can only imagine the utter heartbreak it caused my parents. Bob's death, however, was not openly discussed in our family and, in fact, rarely mentioned. Like so many others in the post-war years, my parents could not dwell on painful events. Life needed to go on. They needed to focus on rebuilding their lives and providing for their young family.

Looking back, this tragedy also illustrates how my parents, including many others of their generation and maybe even this generation, dealt with feelings and emotions in general: these were repressed and most certainly not acknowledged or openly displayed. Our family basically interacted with each other by pointing to verifiable elements of the outside world. To be open meant, for example, to confess: "yes, I took that pear", or any other statement that could be verified because it referred to events witnessed by someone else. So, honesty or dishonesty were determined by reference to the external world. Openness wasn't about sharing feelings, emotions or inner thoughts. I have rarely seen my parents angry with each other. If they ever disagreed on anything, the children were simply sent away to their bedrooms. In short, it was not okay to show anger, sadness or fear. Maybe in this respect, Bob's death, and later the suicide of my other brother Paul, played a role as well. The associated pain may have been too overwhelming.

I was raised in a family with an entrepreneurial attitude and was not challenged with deeper questions. To be honest, in the first decades of my life I did

not really bother. I conformed to mainstream behaviour: thinking and related action. When flashes of deeper questions came up, I did not pay attention to them and just went on with daily life. To be conscious meant to use my brain to achieve something in life and I have been focused solely on that for the first decades of my life. Besides that, I loved to play field hockey and was often distracted by it. Because my father suffered from diabetes and later Parkinson's disease, I unexpectedly had to replace him as CEO of his property development business at a relatively young age. It has been a challenging but mostly rational and pragmatic journey.

I remember driving from my hometown Huizen to my office in Hilversum in the seventies, when I had become a father of a young family myself. Each day I drove through the most beautiful countryside. Although I was aware of it, I never allowed myself to actually experience and enjoy it. My mind was preoccupied by meetings planned for the day ahead, who I needed to call in between, how to approach a possible financial risk, and so on. At the time, I could not see the beauty of trees blooming in spring, the sunlight coming through the slow dance of clouds in the sky, or the joy on children's faces as they built snowmen before going to school in winter. I wasn't really present.

Back then I could not see that. In the eyes of others, I was successful: I worked for my father's booming company, had a comfortable life and a wonderful family. At some point I even had a driver so I could use my time in the car to read documents (there were no cell phones yet). I followed a script prescribed by human society and its artificial values.

In fact, the way of life I am describing is examples of how most of us directed our awareness back then, and perhaps still do today. We followed beaten paths artificially laid out by human culture, like the asphalt roads that connect our manmade urban structures. Yet these roads represent but a tiny fraction of the unfathomable possibilities offered by nature. There is so much more to be experienced and realized when one goes off-road; so many trails to blaze and explore beyond the boundaries of social conventions; so many perspectives and landscapes that can't be seen from the road. Do we ever stop to consider that our natural 'navigation systems' can do much more than just follow these culturally-determined beaten paths? At the time, I didn't realize that. Everything was comfortably planned, structured, negotiated and thought through in a certain order, as imposed by society. The countless other possible paths offered by nature, beyond the artificial boundaries of culture and habit, escaped me.

Indeed, our thought processes have become so much structured and limited by culture and habit that we are now hardly aware of our natural potential and freedom. We don't even notice that our choices have become shackled by our anthropocentric circumstances. Ordinary life seems to consist now largely of acquiring information about what happens in the social milieu around us, through listening, reading, thinking, studying, and so on. In other words: life now consists largely of obtaining sensory input about an anthropocentric world and then translating this input into the words we use to communicate with each other, so to compare the products of our thinking. In this context, my early adult life was very much like the infancy of my consciousness: it was all about facts and thoughts, not about emotions, let alone feelings or intuitive information.

IS THIS ALL THERE IS? GLIMPSES OF INFINITY

In 1977, my father passed away and I got a substantial inheritance. Call it what you want but at some point, a few years later, only focusing on making even more money just didn't cut it anymore. In the Eighties, I started volunteering for the Red Cross/Red Crescent and, as a result, our family moved to Geneva, Switzerland. I became the leader of a worldwide program aimed at the reduction of child mortality and morbidity caused by diarrheal-induced dehydration. In the early Eighties, five million children died of this cause each year. Staggering! An enormous challenge to help and deal with that hidden tragedy.

As a result of my involvement with the Red Cross my role in the property development business reduced to a supervising function. It was a transition for me to 'lose' the status that belonged to the position, but I also lost the nagging sensation of being lived instead of living, which many of you may relate to. On top of that my Red Cross work was more gratifying and satisfying.

It was then that I first encountered a world beyond Western normality: a world where people actually did not have a toilet and where children simply died, because the 25 cents necessary to pay for oral rehydration salts (ORS) were not available. Sure, I'd seen all that on the news, but those sensory inputs had just never found their way into my heart. My visits to countries where people were really suffering expanded my mind and heart. My mind was in bewilderment: Why we hardly bother, in the West, about the awful living circumstances of others on this round and

all-inclusive planet? And my heart was equally bewildered because I wanted to reach out to them.

Diabetes ran in my family. During the time I lived in Switzerland, I got a few alternative, preventive treatments; including one rather out of the ordinary. Through a friend, I got connected to an American healer. This man was also the healer of the world-famous Dr. Jonas Salk, inventor of the polio vaccine. He claimed that the substance he used in the treatment, condensed nutmeg was an invention of Dr. Salk and that he treated Salk with the same substance. After the treatment, which included eating steamed veggies, brown rice, drinking lots of water and a deep tissue massage, I got into a superb relaxed state. I felt that I fully occupied my body and experienced greatly enhanced clarity. My mental faculty ceased thinking compulsively and so was empty and open to receiving information from beyond ordinary sources. All of a sudden I said to my healer: "Nelly has broken her right collarbone on the nearby ski slope and will be here within 15 minutes to ask for transport to a hospital." Sure enough, just as foreseen, within 15 minutes Nelly, a friend of ours, showed up with her right collarbone broken asking for transportation to the hospital. This event made a deep impression on me. It became eminently important for me to find an explanation for how I could be informed, beyond what my senses could register, about an event that took place somewhere else.

It was through this treatment that I allowed myself to open up for transcendent experiences through which I encountered a reality beyond the one I knew, the finite reality, time/space; the one we all know. This experience was a breakthrough to a deeper level of my consciousness.

How to describe in words what cannot be put into words, as words do not even exist in the realm of infinity? It somehow feels quite frustrating to be limited by words as they immediately pull me back to the restricted beaten paths. I think of the two pages of guidelines I received from the editor for this article, with instructions on how to structure the information in a familiar form (beaten path) so readers can absorb and process it. Offering the information in this article in another way is not possible and, by default, this means that this article will end up becoming more of a mental expression than it should. Alas!

Let me try to describe my encounter with infinity by means of a metaphor. I'll describe the sensory-based, sequentially unfolding reality we all know, each from our own perspectives a room with a curtain in it, I see objects I can describe with words, ordered in a normal manner, like chairs and a table. I can hear someone talking, smell coffee, and turn the page of a newspaper. I am in the realm where the past grows each day and the future shortens.

Imagine this side of the curtain as the metaphor for the 'lateral experiences' we ordinarily have with our eyes open.

Now, when closing my eyelids, I found myself on the other side of the curtain, the 'non-lateral', the Infinite. There, I could not 'see' anything. When I turned around and looked back, I expected to see the curtain, but I could not see the curtain either. In the meantime, I experienced a superb feeling of flow and non-resistance. This was something I had never experienced in my life before. Of course, I did not really turn around or look back; I am speaking metaphorically, as expression through words is sequential and limited.

I had never felt more welcome anywhere. All dualities faded. There was nothing and there was everything at the same time. It was timeless, non-local, endless and, more importantly, I experienced sheer bliss! In that non-dual, non-space/time reality, I let go of everything, including the 'I'. The constant thinking, we are so accustomed to, was gone and I experienced nothing but feelings. No, even stronger: my experience was beyond feelings. It was sheer 'beingness', with instant, superb clarity and a sense of immense and intense love. I felt utterly peaceful and at one, which filled me with a profound sense of gratitude and… it lasted zillions of years and… there was no 'I', just eternity. I realized that my mental faculty was not burdened by compulsive thinking and that's exactly why it was superbly clear. I allowed myself to be thought or, in other words, to receive information from the infinite.

At some point in this reality (behind the curtain, where in fact there is no curtain anymore), I experienced a thought saying "why me?" This brought me back to this side of the curtain, the finite realm, right away. Life continued as usual, like before. Only much later did I come to see that this was the kind of sabotage inherent to the ego.

This experience lasted perhaps 15 seconds, measured in time on this side of the curtain. However, the experience has been more impactful to me than my whole life up until that moment. Those '15 seconds' changed my perspective on existence, life and death forever. I had experienced an infinite reality, an infinite consciousness that, in fact, had always been immanent in my finite life. The latter represents an illusory confinement of our inherent natural freedom, defined by the language of the lateral by questions such as who, what, when, how and where. These realizations

have mesmerized me ever since. Why do we express everything in finite terms, excluding the ever-present infinite in and beyond the finite? Why do we suppress the essence that 'I' encountered in the infinite, which is nothing but the experience of sheer bliss? How can mankind cause so much chaos when our essence is like the experience I described?

Having had the experiences in the infinite realm, for which I am deeply grateful, I could then look differently at my life compared to before those experiences. I now ponder about my lateral experiences in a predominantly mental, finite world, where human consciousness is generally equated with thinking, whereas there is so much more than just the rational information available to us. It has been like finding out that the Earth is round, not flat; a paradigm shift. This kind of shift in perspective is somewhat illustrated by this image

in which there are two women but initially you only see one. When you finally see both of them, you still do not see them both at the same time. Yet they are always there, and perhaps there are even more …

Through my experiences beyond the curtain, I have the memory and point of reference that reassures me, on this side of the curtain, that unconditional love is real. In the remainder of this article, I'd like to share with you three of my main insights on our finite reality, fuelled by inspiration from the infinite.

NEW INSIGHTS ON THE FINITE

INSIGHT 1 ~ GRATITUDE - LIFE IS A GIFT, NOT A GIVEN

The blissful experience of becoming part of a field of unconditional love left me with a sense of profound gratitude. It made me realize deeply that life is not a given; something inescapable we just have to go through. This gratitude is an attitude that comes from my awareness that the life-force running through my body has not been created by me, or even by my parents. So, by being aware of receiving that gift of life, I can express my gratitude for the force or power from beyond that has created me. That same force or power has created the finite, everything and everyone around me that I can be aware of through my senses. These senses have been given to me and to all of us by the same power that has created us.

This shift in perspective had a profound impact on my life, as I recognized it was not 'all about me or my close ones,' or about our anthropocentric lifestyle. This more detached attitude made it possible for me to receive other gifts (that what expresses itself as in-formation, time/space) from the infinite.

Gratitude also energizes and maintains an invisible umbilical cord: the connection we all share with the infinite! Gratitude for the gift of unconditional love, which is to be recognized as immanent in each of us, given to us from the infinite source that created us, opens the pathway to continued inspiration and (co-)creation from that source. The attitude of gratitude, like love, needs to be nurtured. I feel the whole purpose of being alive is to 'de-velop' ourselves in such a way that we can experience the source we stem from again, and then act accordingly. That is to say, to act in the 'lateral' world in accordance with the interest of the whole and all, as opposed to ego-based agendas.

INSIGHT 2 - A DESCRIPTION OF AN EXPERIENCE IS NOT THE EXPERIENCE ITSELF

I realize, dear reader, that reading about my experiences and my interpretations of them are not part of daily life, let alone of mainstream science. This is the reason why I asked you to join me in going over the edge of our belief systems in the beginning of this article. Let's try to continue to be open to the new with two other examples from daily life.

I remember that, when I was a young boy, I saw snowbells for the first time in my life, before I even had the words to name them. It is not so much the beauty of those little flowers that I remember but, much more a profound, pure and unbelievably good feeling that came along with my observation; a pure feeling that, not too long ago, I had again when, to my surprise, I saw snowbells on an early morning walk. That feeling reconnected me with my youth experience, which I would now describe as experiencing sheer essence; awesome; something to be really grateful for.

This snowbell experience is an authentic example of experiencing pure feeling, without restricting it through words. You may be able to relate to the following example even better.

Think back to your own experiences of looking at a child who does not master language yet. My

youngest grandchild, for example, still lives fully in the pure feeling of direct experience, without naming or interpretation, as long as any form of fear does not challenge her. I believe her to experience, for example, pure excitement when I, her grandfather, enter the room. She expresses this excitement without any reservation. When an innocent child smiles at me, the smile expresses itself in every cell of its body and I really cannot help but join with it. Such a feeling of connection is again authentic on my part.

In my view, experience without naming or interpretation corresponds to infinite essence and sheer bliss. The babies and toddlers are still in the domain of direct experience without the mental faculty contaminating it with interpretations. My snowbell experience is a first-hand example. The feeling faculty of babies and toddlers is still open and is hardly influenced by emotions, opinions or judgements. When the mastering of language starts to kick in, the child begins naming and interpreting and risks to drift away from the experience of essence.

In our communication during adult life, we seek to describe experiences through words and other symbols. But the activity of describing is a form of documentation of the past and is not the original experiences in themselves. So, for example, describing snowbells after the fact is not comparable to the immediate feeling of seeing snowbells. Descriptions have their function: by describing we communicate and can thus compare and place information in order. We are so accustomed (and addicted) to this practice and way of life that we all seem to trust it as the only way. These after-the-fact descriptions, in words and other symbols, are the mainstay of communication. Language is the vehicle through which the mental faculty, the intellect, expresses itself. But it is not a vehicle suitable for the equally important feeling faculty, this being precisely the crux of the problem: our culture's reliance on language leads to an overvaluation of the mental faculty. Consequently, the intellect ends up hijacking the feeling and intuitive faculties and, with them, consciousness as a whole.

Could we accept, as a hypothesis, that maybe the human intellect and the brain that hosts it operate as a limiting filter of infinite consciousness? And related to this point, might it be the meaning of our existence here to expand our consciousness from an exclusively local state to a transcendental one? Could we try not just to comprehend or understand but also be conscious of the infinite energy inside all of us, and be grateful for it?

INSIGHT 3 ~ INFINITY EXPRESSES ITSELF IN THE FINITE BY THE GRACE OF RESISTANCE

As I described above, in the first part of my life I saw our finite reality as 'the only truth', till I experienced the infinite reality, which had in fact been immanent in my finite reality all along. At the time, I was simply limited by my level of human consciousness and lacked connection with the infinite. In my view now, there are two realities: the infinite and the finite one. I already shared with you earlier how bewildered I was, after my transcendent experiences, by the realization that we are not connected, at least in daily life, to our infinite essence.

I am currently aware that the infinite expresses itself in the finite by the grace of the phenomenon of resistance, which holds polarities (such as +/-, past/future, here/there, etc.) apart. Without resistance, the polarities cannot be held apart and, consequently, there cannot be space-time. After all, space depends on the distinction between here and there, and time on the distinction between past and future. Without the resistance that maintains these distinctions, the polarities would collapse into each other because of their underlying mutual attraction (like the inherent attraction between positive and negative electric charges), there remaining only infinity or essence.

Just like the polarities in physics (such as +/-), we can determine other expressions of polarities in our daily life, such as the pairs described in the table below. These words represent 'male' and 'female' principles:

PLUS	MINUS
male principle	female principle
giving	receiving
mental faculty	feeling faculty
thinking - to be thought	feeling emotions - to be felt/intuited
physical power	power of vulnerability

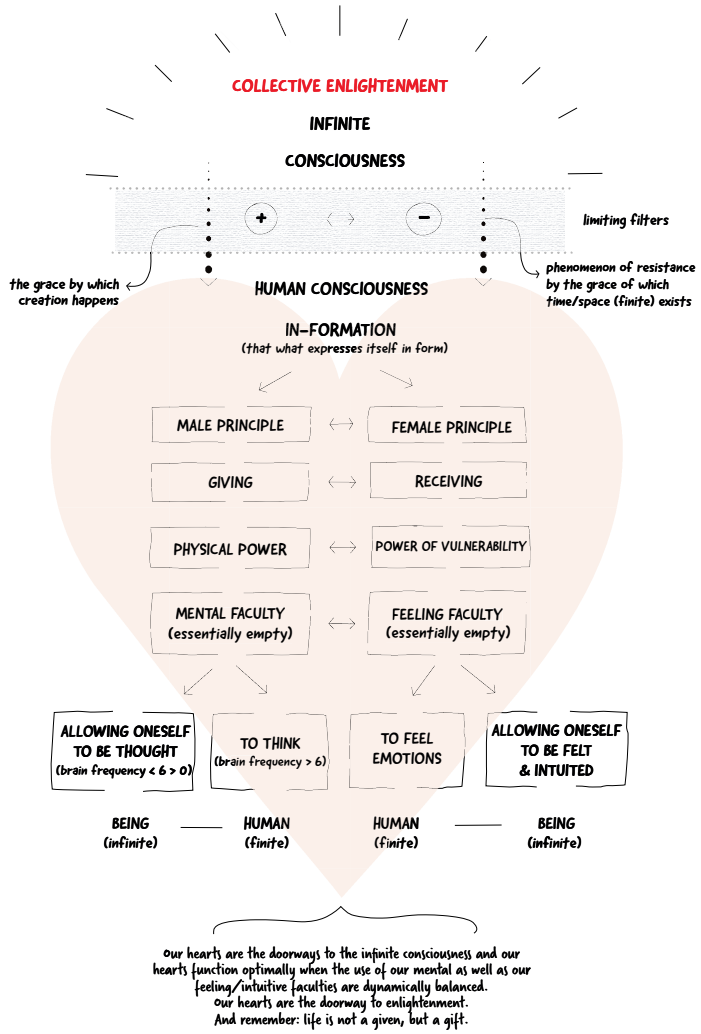
By the grace of resistance, creation unfolds optimally through the acknowledgement of the differences between the polarities and the dynamic harmony between them. When this dynamic balance is achieved in our consciousness, we can experience unconditional love or enlightenment. This would be the ideal world!

In reality, however, there are enormous imbalances between these two polarities. This brings forth all kinds of distortions. As an example, we are so much out of touch with the natural harmony and dynamic balance between the polarities that world wars and huge harm to the environment have become realities. Indeed, even climate change is a result of this dysfunctional, anthropocentric human behaviour.

We have, for example, put physical power on a pedestal and with it we are destroying the power of vulnerability because we see vulnerability as a weakness. Yet, without the power of vulnerability life would be impossible. Think of all unborn animal life, plant seeds, fungal spores, etc.: how vulnerable, yet powerful, they all are! The use of physical power is perfectly okay as long as it is dynamically balanced with the use of the power of vulnerability. Yet, even a cursory observation of our social dynamics reveals that we are far from achieving such a balance. As an obvious example, men and women are not treated equally. Indeed, although some progress has been made in several countries, it is very sad to observe that, by and large, men still oppress women on many levels.

Another big roadblock on the path to collective enlightenment is our common belief in scarcity and the fear that such a belief brings about. The general consensus about there being scarcity of resources causes fear-driven competition, with all the detrimental aspects that come with it, such as war and environmental pillage.

I now invite you to take a big step in your thinking. Space-time, the finite, is an all-inclusive dynamic phenomenon that expresses itself all the way from high densities deep in the earth to the subtlest fields at the edges of our universe. So, it would be more consistent with the nature of the finite to include everyone in our social and economic systems than to exclude so many. The logical approach, which by the way is also the loving approach, is to ask the following question: How can we compare with care in order to share with care? By comparing we can develop ever more efficient ways to create products and services, respecting natural law, so the illusion of scarcity can be eliminated and all can share in the richness of nature. When there are surpluses somewhere, we can transport these surpluses to those areas where there are shortages. So, to compare, although usually associated with competition, can be very functional insofar as it contributes to ever more efficient production and distribution of resources within the boundaries of sustainability. Unfortunately, this is not how we choose to go about business today!



When we use our male and female faculties in a functional way, by giving them equal caring attention, we can rebalance ourselves both as individuals and as a species. It is through this change of consciousness, individually and collectively, that we can achieve dynamic balance in the practice of life, acting out of love, gratitude and inclusiveness.

Of course, I realize that we are far from this ideal dynamic balance. We all struggle, including me. And every day I fall flat on my face. But every time I also get back up, and so can we all, collectively, with an attitude of forgiveness. The seriousness of our present predicament is not a reason for hopelessness.

A schematic depiction of the ideas I have been discussing may be useful at this point, so consider the diagram above.

How can we bring our awareness to dynamic harmony between polarities?

Let's focus on the mental faculty and the feeling/intuitive faculty and try to explain how dynamic harmony between the two might work and how that balance connects us to the infinite.

MENTAL FACULTY

Our mental faculty is basically a skill-set and, as such, essentially empty of contents. We fill it with thoughts and then put the products of our rational thinking on a pedestal (we don't do that equally with the products of our feeling faculty). There is nothing wrong with thinking, on the contrary. However, it is also healthy to keep some mental space free (through, for instance, meditation, silent contemplation, etc.) so that we can allow ourselves to be thought. Here is what I mean by this: to open ourselves up for ideas that pop up spontaneously in our mind, in a way that has no rational explanation. Mozart, Einstein, you and me: we have all had this kind of experiences. Moreover, if we keep our minds less congested with ego-generated thoughts, we stand a better chance to really feel our emotions and eventually let go of them.

Let's dwell a little longer on the perils of thinking. Thinking can only express itself in comparisons of symbols and words. But when we compare symbols and words, we often end up with opinions and judgements defined in terms of right or wrong. Our choices become thus prone to exclude, rather than include. Since my blissful experience described earlier, I came to realize the utterly unnatural dominance of the rational intellect in the manmade world, as well as the diminishing role of our hearts in the decisions we make. Every decision to act or refrain from acting, if not filtered by the heart, becomes prone to exclusion and can hit like an unguided missile, leading to great harm and suffering.

In conclusion, overcrowding our mental faculty with ego-generated thoughts creates a barrier to being thought. For the reception of transcendent information from the infinite, such as the information I received about Nelly and her broken collarbone, we need to have a relatively empty mind.

FEELING FACULTY

I make a distinction between ordinary emotions and the capacity to allow oneself to be felt. Allow me to explain.

Let's compare our human bodies with a musical instrument; say, a violin. When the violin is played well, the sound harmoniously resonates with the body of the violin and is then released freely into the environment, which is what allows us to hear it. The violin thus vibrates along with the sound, but does not 'hold on to it', so to speak. Now let us use this image as a metaphor for ourselves. We are played, like the violin, by all the experiences of life, which our bodies vibrate along with. If we had no opinions and no judgments whatsoever, our conscious experiences would simply flow, without blockages or hang-ups, through our bodies in a constant process of letting go, go, go. Free of ego-generated emotions, the feeling faculty would still be able to discern the experiences that 'pass through' it, but would not hold on to any of them, thus remaining free of any forms of fear. This is the experience of allowing yourself to be felt.

EMOTIONS

Now let's talk about emotions. Emotion is not a faculty like the feeling faculty. It has in a way, a warning function to help direct our attention to what keeps us away from the characteristics of the whole, such as clarity, oversight, compassion and discernment. Let us again use the violin metaphor. Imagine that we place a big chunk of chewing-gum on the body of the violin. The effect is clear: when the instrument is played, false tones are produced. The sound is perturbed and we experience it as something unpleasant to our ears. The chunk of chewing-gum blocks the intended harmonics. Going back to human consciousness and the human body, the false tones produced as a result of the chunk of chewing-gum stand for emotions and all forms of fear. In this state, we are handicapped and miss the opportunity to be connected, and in resonance, with the whole and all. On another level, this emotional state can also serve us as well: if we are willing to heed the warning conveyed by the emotion and see what opinion or other form of judgment blocks us, we can then learn from it, change our attitude or choice, and remove the blockage.

In conclusion, feelings are different from emotions. Feelings are pure. An attitude of 'letting go' is the key characteristic of feelings, according to this definition. We allow our feelings to be felt. Emotions we can feel too. However, the key characteristic of emotions is the 'holding on' to thought forms. They block our ability to experience pure feelings and, as such, render us unable to discern what is in the interest of the whole and all. These blocks are expressed in all forms of fear.

In my view, judgements are different from discernments: judgements are associated with emotions

and emotions hinder us from seeing the interest of the whole and all. Discernment, on the other hand, is associated with accessing transcendent information in the interest of the whole and all. Maybe we can regard the power of discernment as the ability to think and feel through our hearts.

BALANCING THE TWO FACULTIES

Both faculties facilitate the processing of information, that is, that which expresses itself in form. Information processing is not a privilege of the intellect! The use of rationality is perfectly okay as long as it is dynamically balanced with the use of the feeling (and intuitive) faculty. This balance between our mental and feeling faculties maintains the gateway to the infinite open. When not anchored in infinity, we fall prey to beaten-path thinking and behaviour. But when connected with the infinite, we can stay loyal to the truth within us.

CONCLUSION

This article reflects the findings of my developing consciousness in the path towards enlightenment. In order to write about enlightenment, I have had to describe the blockages I have encountered, and continue to encounter, on the way. In short: I have realized that I have been hijacked by my rational intellect just like most of us. Our Mental faculty has become dysfunctional, repressing our feeling faculty, whereas both are equally important aspects of human consciousness. Valuing both faculties equally delivers dynamic harmony within a person, between people, and between mankind and their environment. This balance opens up the connection to infinite consciousness as well. The development of our consciousness will allow us to experience, in our finite world, the unconditional love inherent to the infinite. This, in turn, will help us act according to universal principles and values, so to lead our lives in ever greater harmony with the interest of the whole and all.

We are learning to do this by the grace of the phenomenon of resistance, which allows us to experience the contrast between polarities. Often, we associate resistance with the psychological meaning of it: fear (for example for differences or change). However, by the grace of resistance I explicitly mean the phenomena of resistance as it is used in physics: the natural balance of +/-. By letting go of our fear, the phenomenon of resistance will guide us in a natural flow towards enlightenment, instead of operating dysfunctional and creating chaos.

We seem to live in a paradox, as resistance seems to be inherently associated with fear. An old friend of mine mentioned to me back in the mid-Eighties:

Love is letting go of fear.
Where there is fear, there is no love.
Where there is love, there is no fear.

Maybe experiencing love, unconditional love, is enlightenment. In sharing my story with you, we may have come a little closer to collective enlightenment.

Last but not least, as you may have noticed, I am far from being enlightened. I have simply experienced glimpses of enlightenment. I am just like you, one of the billions of expressions of life on this beautiful planet, learning to trust all my informing faculties ever more.

GREGORY WILPERT

CONSCIOUSNESS AND THE POST-CAPITALIST COMMONS

Gregory Wilpert is a German-American sociologist and journalist who has written extensively on Latin American society and politics. He earned his Ph.D. in sociology from Brandeis University in 1994 and currently lives in Quito, Ecuador.

WE LIVE IN A WORLD THAT SEEMS TO BE RIDDLED WITH more contradictions than at any other point in world history. On the one hand we are at the cusp of creating a truly global society that can sustain itself with renewable energy, in which human rights are generally accepted as valid, in which technology can link everyone to everyone, where collaboration and cooperation are the most natural ways to interact, and all of the world's knowledge is available to anyone with an internet connection. These are just some of the amazing trends that many of us are a part of. On the other hand, world civilization is also facing unprecedented threats, ranging from global warming, to perpetual war in some regions, to increasing inequality and persistent poverty.

How can the average person who would like to see the positive trends prevail navigate such a contradictory situation? One way to do so is to identify the positive trends that could lead into a new form of social organization and social being and to find ways to reinforce and generalize these. I say that one should focus on the trends that lead to a new social organization because positive trends that do not lead to a new society could mean that the negative trends remain, since it is the existing society that also produced these. Meanwhile, one should also recognize the negative trends and find ways to stop and reverse them.

When talking about positive and negative trends I am not only referring to trends in the realm of institutions and social practices, but also to the trends in consciousness, in attitudes, in values, in awareness, and in how we make sense of the world. After all, how we act in the world is not just a matter of stimulus-response, but also the result of how we actively make sense of our world – a result of consciousness, in short – with which we then shape our world. Consciousness, though, is also the result of our social conditions. In other words, we need to take both into account: the changing social conditions and the changing forms of consciousness and how these two interact.

This is an enormous task – tracking consciousness, social conditions, negative trends, and positive trends – and so I will limit this article to an aspect that I argue is particularly relevant for the creation of a new and better society: the emergence of the post-capitalist commons. Exactly what I mean by that, how it would benefit mankind, and how it might emerge is the topic of the rest of this article.

EMERGENCE OF THE POST-CAPITALIST COMMONS

The good news is that every day we can observe examples of a post-capitalist, socially just, and sustainable future. One of the best examples of this is the proliferation of so-called commons projects. The perhaps best-known example is Wikipedia. Other important examples are the free and open source software movement and the creative commons license. What do these commons projects have in common and in what ways are they "post-capitalist"?

Borrowing from the work of one of the main theorists of the commons, Elinor Ostrom[1], it is possible to say that these new emerging commons share the following five characteristics:

1 ~ Collectively agreed-upon rules.
2 ~ Self-Monitoring.
3 ~ Sanctions for rule violations.
4 ~ Conflict-resolution mechanisms.
5 ~ No external interference into self-organization processes.

Ostrom's original list had eight principal characteristics. The reason her complete list does not fully apply to the types of commons analyzed here is that she studied pre-capitalist commons, while I want to focus on post-capitalist commons.

In other words, pre-capitalist commons have a several characteristics that simply do not apply to post-capitalist commons or, at least, do not apply in the same way. For example, one key difference is that pre-capitalist commons, such as the typical shared grazing land or the shared fishery, was based on scarce but renewable resources. As a result, clearly defined boundaries (characteristic #1) and rules governing resource appropriation (#2) play a central role in scarce resource commons. After all, if everyone can appropriate as much of the commons resources as they want (grassland or fish, for example), the resource will become depleted and no one would be able to take advantage of it any more. Post-capitalist commons, which tend to be knowledge-based, are potentially limitless or non-scarce (or "non-rival"), and thus these principles do not apply to them. Similarly, the 8th characteristic that Ostrom mentions, the need for multiple layers of organization in large-scale commons is also not as necessary in post-capitalist commons. The reason for this is that post-capitalist commons are based on networking and peer-to-peer principles that do not need hierarchical forms of organization in order to function efficiently.

All of the foregoing, about the difference between pre- and post-capitalist commons, does not mean that scarce-resource commons are irrelevant for post-capitalist commons. As a matter of fact, they can be extremely important, as is the case if we consider the planet's ecosystem a global commons, which needs to be protected and where we need a collectively organized system or rules on how to interact with the global ecosystem. The main reason for making a differentiation between pre- and post-capitalist commons is to point at the differences in consciousness that the two require in order to function well.

There is a third type of commons, though, which we should identify, which also functions under a different type of consciousness from the previous two: the capitalist commons. This might appear to be a contradiction in terms, since we normally consider capitalism to be a system that militates against the principles of the commons. After all, the pre-capitalist commons were largely destroyed with the on-set of capitalism in the 17th and 18th centuries[2]. However, while capitalism was beginning as a form of exploiting workers, some thinkers who wanted to find a less exploitative and less alienating form of production, such as Robert Owen, proposed the creation of cooperatives. If we consider cooperatives to be a form of commons (the capitalist form), this type managed the shared social resource of labour opportunities, instead of a natural resource.

Following Dyer-Witherford (2007), we can thus identify three types of commons:

1 ~ Natural (pre-capitalist).
2 ~ Social (capitalist).
3 ~ Cultural (post-capitalist).

This list does not mean to suggest that natural resource commons are inherently pre-capitalist and that cultural (or knowledge-based) resource commons are inherently post-capitalist. Rather, the association with a particular period refers to when a particular form of commons emerged and which type of consciousness begins to apply to any of the previously developed of commons.

But why bother making the distinction between pre-, post-, and capitalist commons? How do these types of commons relate to the economic system known as capitalism? The main reason for making this distinction is based on the recognition that capitalism is an economic system that came into its own in Western Europe in the 17th and 18th centuries and gradually conquered all societies of the world. While it delivered enormous technological advances and improvements in science, education, and standards of living, it also contributed to ever-greater inequality and poverty for large segments of capitalist societies.

Capitalism is based on three main pillars: private ownership of the means of production, competition among producers and among workers, and a state that maintains the two previous pillars. If we agree that capitalism is no longer sustainable, mainly because it has brought the planet to unsustainable levels of inequality and of environmental degradation, then it makes sense to see whether we can identify new institutional forms that are better. One such emerging form, I suggest, is the development of the post-capitalist commons. These deserve the designation "post-capitalist" because they counter all three of the pillars of capitalism. Ownership is shared and not private, competition is replaced with cooperation and collaboration, and they are governed by collectively derived rules that ensure the two previous principles and not those of capitalism[3].

CONSCIOUSNESS AND THE COMMONS

A particular type of consciousness predominated in each of the three types of commons. By consciousness I mean the perspective from which we see and make sense of the world. This making sense of the world can be divided into at least three spheres: how we perceive the world cognitively, how we relate to the world affectively, and how we justify our interactions with others in the world morally or ethically.

We can analyze the three different types of commons – pre-capitalist, capitalist, and post-capitalist – in these three spheres as follows:

1 ~ PRE-CAPITALIST NATURAL RESOURCE COMMONS

A ~ Cognition: In terms of cognition the type of consciousness that predominated was one that developmental psychologists call "conventional"[4] and that sociologists often call "traditional." This means unquestioningly accepting the worldview that one's ancestors or religious authorities impart.

B ~ Affect: One's affective relationship to the world – or empathy – is limited to one's social or ethnic group. That is, outsiders are generally seen as being less worthy or less deserving of empathy and understanding[5]. The lack of empathy towards outsiders is not necessarily a wilful refusal to empathize, but can also be the result of a psychological limitation simply because the "other" is too different to understand or appreciate.

C ~ Moral reasoning: The affective relationship feeds directly into one's moral reasoning about how to treat others and act in the social world. Just as one's cognitive ability, moral reasoning is based on traditional practices and customs that are unquestioned and which tend to prioritize members of one's own community or group above that of outsiders.

D ~ Typical characteristics of the pre-capitalist natural resource commons: Based on the foregoing we can see how and why this type of commons tended to be organized. The boundary limitations mentioned earlier, which is typical of natural resource commons fit very well with a form of consciousness that limits cognitive understanding, affect, and moral reasoning to the members of one's own group or community. A natural resource commons had to be limited to a particular group and the form of consciousness fit with this requirement. Social and cultural commons simply did not exist because both work and culture were usually organized along hierarchical status differences, where religious leaders or political leaders wielded power over others with less status-based power.

2 ~ CAPITALIST SOCIAL RESOURCE COMMONS.

E ~ Cognition: Here one's ability to make sense of the world cognitively makes an important leap from relying on the meaning making of others to the meaning making of one's own rational faculties. In other words, the person begins to question received wisdom and to try to elaborate an understanding of the world independently of others. In developmental psychology this is known as post-conventional reasoning. Historically the emergence of enlightenment philosophy of the 17th century was the main example of this transition in the West. However, just because one thinks one is thinking independently, does not mean that one is. Socially handed down frameworks and paradigms continue to shape this type of consciousness, but these are largely unconscious and not used as a justification for thinking the way one does.

F ~ Affect: The empathic range begins to go beyond one's immediate community or social group and in principle expands to all of humanity. However, the empathic range is still limited by a false assumption that everyone else is similar to oneself. That is, the universalization of empathy goes hand-in-hand with the universal projection of one's own affect on everyone else. It is thus a sort of false empathy, which assumed that one's being in the world is the same as everyone else's. It thus cannot take cultural differences properly into account.

G ~ Moral reasoning: Universal law and universal moral codes begin to emerge, where everyone ought to follow the same law and same moral code. This is thus particularly important for the emergence of universal human rights. It is no coincidence, though, that the first human rights that emerged were very individualistic rights, such as the right to freedom of speech, of assembly, of property ownership, and of equality before the law. These individualistic rights came first because they fit very well with the individual's emancipation from the group and its traditional norms. This individualistic rational morality thus also made the emergence of capitalism possible, which freed the peasantry from feudal relationships and freed the entrepreneur to maximize profits regardless of what this might mean for others.

H ~ Typical characteristics of the capitalist social resource commons: Under capitalism two very different types of social resource commons began to develop. The first is the corporation, where the shared resource is the capital that has been invested in the corporation. One could argue, though, that the corporation is not a commons at all because the workers in a corporation generally have absolutely no say in how the corporation is organized or managed. However, if we consider that the shared resource is capital and that membership is limited to those who contributed the initial capital, then the workers are technically not members of this type of social resource commons. The corporate investors, though, do jointly decide on the overall management and rules of the corporation. The second, perhaps more obvious form of social resource commons under capitalism is the cooperative. Here the shared resource is the labour opportunity that the entire business provides and that all who participate in the cooperative jointly decide

on its management, rules, and organization. Both types of social resource commons (corporation and cooperative) depend on a form of consciousness that can accept anyone – of any social or ethnic group – as members, as long as they have the money to make the initial investment for membership. Also, the internal rules or governing principles apply equally to all members (this is true in principle also in pre-capitalist commons, but the homogeneity of membership, where everyone tends to be from the same social group, in this type of commons makes equality of membership a non-issue in pre-capitalist commons).

3 ~ POST-CAPITALIST CULTURAL RESOURCE COMMONS.

I ~ Cognition: The cognitive ability to make sense of the world makes another major leap, this time to see the contextual and social frameworks of ones' (previously presumed universal) understanding. That is, individuals here become more aware of their systemic embeddedness in social relations and how this limits their ability to fully understand the world. It represents a major leap in understanding because recognizing these limitations and frameworks is important for overcoming these. Some call the cognitive ability at this stage "systemic" because people see their embeddedness in systems of relationships and how these relationships affect their way of perceiving the world.

J ~ Affect: The ability to see relationships across social boundaries and to see all human beings as fundamentally equal also deepens and broadens the scope of empathy the people feel for others. While in the capitalist commons it was assumed that everyone is the same and that equality is based on a false sense of sameness, in the post-capitalist commons there is a recognition of equality despite the differences between people.

K ~ Moral reasoning: As we recognize equality in difference and difference in equality, the applicability of universal law is elasticized in favour of adherence to key principles. That is, instead of insisting on equally applying the laws of one particular society on everyone else, key principles, such as concepts of fairness, justice, and freedom become far more important. Also, as we recognize that political human rights mean little in situations of extreme poverty and inequality, we begin to take social and economic human rights more seriously.

L ~ Typical characteristics of the post-capitalist cultural resource commons: While the capitalist social resource commons is universal in principle, in the sense that anyone who has the capital or money can join, the post-capitalist cultural resource commons is universal in practice. Membership boundaries thus become a non-issue. Also, there is greater flexibility in the application of rules and sanctions and greater tolerance for the wide variety of activities of all participants in the commons. This is further facilitated by technological advances, which network all participants with each other, thus creating a truly peer-to-peer society, in which inequalities and power hierarchies are seen as obstacle for the functioning of the commons. While individual rationality and the fulfilment of individual needs (or of corporate needs, which were seen as being the same as an individual) were predominant in the capitalist commons, in the post-capitalist commons there is a conscious effort to overcome the dualism between individual and collective[6]. The development of the post-capitalist cultural resource commons is further advanced because cultural and knowledge exchange is much freer and uninhibited, both because of the ways in which technology makes such exchanges easier, but also because the recognition of equality in difference makes it more acceptable. The principles learned in the creation of cultural resource commons can then be gradually transferred to post-capitalist natural and social resource commons[7].

SUPPORTING AND COUNTERVAILING FACTORS FOR THE DEVELOPMENT OF POST-CAPITALIST COMMONS CONSCIOUSNESS

As mentioned in the introduction, we live in highly contradictory times. On the one hand we are finding new ways of cooperating, of making the post-capitalist commons a reality, while also developing new methods for improving our ecological sustainability. On the other hand, vast sectors of society remain excluded from these developments and, if anything, in conditions where living conditions become worse and further removed from commons-based forms of life. In the following section I analyze this dichotomy and how we might strengthen the positive trends and counter the negative ones.

SUPPORTING FACTORS

We can divide the factors that support the development of post-capitalist commons consciousness into three categories: external, internal, and social. By external I mean the material, technological, and economic conditions. That is, this includes the previously mentioned technological advances that allow us to connect with one another at very low cost, no matter where we are on the globe. This instant connection and networking helps develop the consciousness that thinks in terms of systemic relationships and is able to expand its empathetic reach. Also, for those

who are lucky enough, the relatively good standards of living and comfort mean that many people no longer need to think materialistic terms about how to make a living, but can afford to focus more on how to make a good life[8].

The internal conditions that support the development of a post-capitalist consciousness primarily have to do with the existential crisis we are confronting today. That is, the ecological crisis and the increasing economic uncertainty in most societies means that we are being pushed to fundamentally re-think our relationship to nature and to each other. This kind of rethinking can result in a step backwards, towards pre-capitalist consciousness, or in a step forward, towards post-capitalist consciousness. Which path is taken depends on historical and contingent contextual factors in which these crises are being confronted[9].

Finally, by social factors I am referring to precisely the social context that can help move consciousness development forward or that might move it backward. The tendency, though, is for societies to learn from their past and to advance. Of course, this is not always the case and history is littered with examples of social regression (Nazi Germany being one of the best known examples). However, in the context of the ecological crises we are beginning to re-discover pre-capitalist values of living in harmony with nature and are learning how to apply these values in our current highly technological context[10]. The recent trend to adopt ancient indigenous notions of living in harmony with nature, also known as "good living" or "*sumac kawsay*" in Kichua (an indigenous language of the Andean region) in Latin America is an example of this[11].

COUNTERVAILING FACTORS

The perhaps most serious countervailing trend for the development of post-capitalist commons – both its consciousness and its social practices – is the growing social divide within and between societies. A recent study by MIT economist Peter Temin (2017) makes this argument for US society by demonstrating that over the past 40 years the US has been moving towards what economists call a "dual economy." That is, one economy for the bottom 80 percent and one for the top 20 percent, where each economy is separate and distinct from the other and neither is particularly aware of the economic conditions of the other. The top 20 percent, which Temin calls the finance, technology, and electronics (FTE) sector, live in economic security, with excellent schools, good health care, and general comfort. The bottom 80 percent, in contrast, live in economic insecurity, with average to bad schools, precarious health care, crumbling infrastructure, and uncertainty about the future. Their overall conditions come to resemble those of typical third world countries.

One of the consequences of such a dual economy is that just as the economic conditions are diverging, so does consciousness. While the bottom 80 percent are stuck in a cutthroat neoliberal capitalist system and the consciousness that is required to survive in it, the top 20 percent have the leisure to develop a more "post-materialist" consciousness[12], which is also compatible with networked technology that allows for the development of consciousness for a post-capitalist commons.

This trend of growing inequality and towards a dual economy is not just happening in the US, but in most western societies[13]. Both national and international economic policies contribute towards this trend. That is, with the growth of neoliberal ideology and economic policy since the 1980's there has been a strong growth of inequality not just within countries, but also between countries. For example, to just mention one global measure, gap in terms of per capita GDP between the US and the third world has tripled between 1960 and the present[14].

It is this divergence of economic fortunes that explains the dichotomous developments, between the possibility of a future post-capitalist commons world, in which everyone is networked, is involved in peer-to-peer projects, and increasingly use renewable energy and green technology, and a "savage capitalist" world of economic, political, and social uncertainty and instability. This part of the population that is affected by this latter trend is increasingly aware of the inequality and unjustness of the political-economic system and faces the option of either trying to make political gains to create greater equality or to return to a mythical better time, in which tradition and authority bring about order (as in Trump's campaign slogan, "Make America Great Again"). This, in essence, explains the rise of far-right movements in the US (and the election of Donald Trump) and around the world.

Finally, a third countervailing factor, besides growing inequality and neoliberal policies, is the growth of the surveillance state and of "psycho-politics[15]." That is, the very technologies that make the post-capitalist commons possible also enable the rise of a regime that tries to control and watch over the population. Privately owned social media platforms collect massive amounts of data that allows these to target advertising and information so as to manipulate users not only into buying particular products, but

also into believing particular things. This approach is also known as "big data," which becomes ever more powerful when the data is shared across platforms, particularly with government agencies. It is a form of psycho-politics in the sense that the manipulation is targeted at specific individuals, not just on the basis of demographic information, as used to be the case with conventional television or newspaper advertising, but on the basis of personality profiles that social media platform users willingly divulge. These manipulations, in favour of particular products or political orientations would tend to undermine the consciousness development that the Internet more general encourages.

WHAT CAN BE DONE?

The perhaps most serious obstacle for bringing about a post-capitalist commons consciousness is the inequality that has been growing since the 1980's. It is, in effect, holding back a vast segment of the world's population, all the while the other part of the world's population benefits from the increasing inequality. Most people in the upper segment of this dual economic system don't realize it, but in the US (and in many other countries) this sector finances political campaigns of politicians and supports media outlets that pursue policies to maintain the status quo. The first step to reverse the inequality that our political and economic system perpetuates is to get money out of politics.

But even this is not enough as long as the most important media outlets are also backing policies and political candidates who seek to maintain the status quo. In other words, a profound democratization and diversification of the media landscape is necessary (particularly in the US). Now that more and more people are getting their news and their political analysis from social media, this means that all media (both traditional mass media and social media) need to be transformed from a for-profit basis to a commons. A transformation of the media landscape into a global post-capitalist commons would also address the problem of the psycho-political manipulation of the population.

Once the financial and mediatic basis is removed from maintaining the status quo, policy changes in the direction of reversing economic inequality become much more feasible, especially if these are policies that are directed at everyone and not just towards the poor. Guaranteed basic income would be perhaps the most important such measure[16].

CONCLUSION

The next 30 to 50 years will probably be decisive for the survival of the human race. Maintenance of the status quo is no longer feasible because we are reaching absolute limits of ecological and social sustainability. The way out, of transcending this crisis, is to move towards a post-capitalist commons-based society. The capitalist system has gotten us into this mess and only its transcendence will allow us to overcome its problems. The gradually evolving post-capitalist commons and its accompanying consciousness points in the right direction.

A possible vision for what a global society based on the post-capitalist commons could look like involves the three spheres discussed earlier: global natural commons, global social commons, and global cultural commons. For each of these to function properly, though, a critical mass of individuals would have to manage these from a post-capitalist consciousness of the kind described here.

The global natural commons would have to manage first and foremost the air and the oceans. We already have multilateral agreements and forums for making such decisions, but when they are made between governments they are generally going to be far less effective than if they are made between citizens, all participating on a peer-to-peer basis on developing rules that apply equally to everyone (as opposed to the current system, whereby developed Western countries try to reach agreements that allow them to continue to pump far more carbon dioxide into the atmosphere per capita than populous nations such as China or India).

Achieving a global post-capitalist commons for the social sphere (mainly labour and income) will probably be far more difficult to achieve because of the highly complicated logistics such an undertaking would involve. However, if we are to reduce the inequality within nations and between nations, eventually this issue will have to be tackled. First we will develop post-capitalist social commons on a national level for labour and income. Eventually these could be expanded to a global level, so as to reduce global inequality.

Finally, the currently most advanced post-capitalist commons is in the sphere of culture, knowledge, and information. This is because the technological infrastructure of the internet and of global communications has facilitated the development of this sphere the most. The key here is to create new post-capitalist culture commons, such as for the previously mentioned social media and for news more generally. It actually would be a relatively simple matter to turn

social media platforms such as Facebook or Google into post-capitalist commons, which are no longer based on private profit, but on the common good, as defined by all participants in these platforms.

Whether we achieve these different types of post-capitalist commons depends not only on having the technological infrastructure in place, which enables peer-to-peer communication for coordinating and managing these on a large scale. It also depends on whether the participants in these commons have the pre-requisite consciousness to recognize systemic relationships, to empathize, and to develop flexible but principled rules for managing post-capitalist commons on a global scale. Certain trends in today's society give us reason to hope, but only if we manage to overcome the negative trends that threaten to undermine such a project.

♦

[1] Ostrom (1990).

[2] Marx writes about the movement to "enclose" the commons, as a form of "primitive accumulation." See also, Linebaugh (2014) and Wall (2014).

[3] Examining this definition of post-capitalist commons could lead one to conclude that a capitalist commons is a contradiction. We will explore this issue in greater detail below, but a capitalist commons, in the form of a cooperative in a capitalist economy usually still displays the three pillars of capitalism: private ownership (in the form of shares), competition (between businesses or cooperatives), and a state that ensures the previous two pillars.

[4] Here I am particularly thinking of the founder of developmental psychology, Jean Piaget, who coined the term. Much of my thinking in this area is inspired by the work of Ken Wilber and Jürgen Habermas. See, in particular, Wilber (2000a, 2000b) and Habermas (1976).

[5] There is quite some variation here, though, as some so-called traditional cultures urged their members to accept and value all humans or all life on earth. However, this attitude or empathy would be accepted more out of a sense of obligation to follow the received tradition or one's authority figures.

[6] The overcoming of the individual-collective dualism can easily be misinterpreted as meaning that the individual is subsumed or dissolved into the collective. This is typical of the pre-capitalist approach to this dichotomy. Rather, in post-capitalist consciousness there is a dialectical integration of the two, where each continues to exist, but modes of being are found where each comes into its own.

[7] For discussions of how this can happen, see, for example the website of the P2P Foundation http://bit.ly/2qtfw8R or the work of Rifkin (2014).

[8] Inglehart (2005) refers to this as the transition from materialist to post-materialist values.

[9] Two key philosophers who have made this argument are Rudolph Bahro (1994) and Peter Sloterdijk (1988).

[10] Not all pre-capitalist societies valued living in harmony with nature. One could even say that most agricultural societies did not, since they planted crops and exploited animals, often to such an extent that the land became over-used and eventually could no longer support the population. The Maya and the Mesopotamian civilizations are two prominent examples of this. Generally it is the hunter-gatherer societies that value harmony with nature above all else.

[11] Rosa (2016) develops a whole critical theory of society based on the notion of "resonance," which is quite similar to that of harmony.

[12] This isn't to say that everyone in the top 20 percent develops a post-materialist or even post-capitalist consciousness. This varies greatly depending on the type of work that they engage in. For example, those involved in the finance sector are perhaps the most capitalistically oriented. Those in the software and technology sector, though, are more likely to develop a post-materialist and post-capitalistic consciousness.

[13] Several recent studies show that global inequality has increased and continues to increase since the 1970's in most western societies. See, for example: Rakesh Kochhar (2017) "Middle Class Fortunes in Western Europe," in: Pew Research Center (http://pewrsr.ch/2rIUPu7) Also, upward mobility is far lower in the post-1970 period relative to the first half of the 20th century: Raj Chetty et al. (2017), "The fading American dream: Trends in absolute income mobility since 1940" in: *Science*, Apr. 24, 2017 http://bit.ly/2rqU0Xg).

[14] Jason Hickel, "Global inequality may be much worse than we think," April 8, 2016, *The Guardian* http://bit.ly/2qthaaF.

[15] This is a term coined by Byung-Chul Han (2014), who contrasts psycho-politics with Michel Foucault's concept of "biopolitics."

[16] The number of books and studies in this area are increasing steadily. Recent useful arguments in favour of guaranteed basic income are: Van Parijs (2017) and Srnicek and Williams (2015). One should note, though, that income from work is not the only source of inequality. Another source of economic inequality (as opposed to educational inequality, which another issue) in society is unearned income, that is, from investment and interest. Proposals to address this are too complicated to deal with in this article, but generally have to do with changing the way interest works. Good work in this area include Eisenstein (2011) and Kennedy (2011).

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ROGER D. NELSON

SHIFTING GLOBAL CONSCIOUSNESS
TO GLOBAL AWARENESS

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♦ ♦ ♦

We haven't worked on ways to develop a higher social intelligence […] Ordinary thought in society is incoherent – it is going in all sorts of directions, with thoughts conflicting and canceling each other out. But if people were to think together in a coherent way, it would have tremendous power. – DAVID BOHM.

♦

EVIDENCE FOR NOOSPHERE

FOUR DECADES AGO I ENCOUNTERED Teilhard de Chardin's ideas, and I've never forgotten the excitement of his conviction that our human purpose is to become a "noosphere" for the earth, a sheath of intelligence covering it like the winds of the atmosphere[1]. He thought it would be thousands of years before there could be a coalescence, before this great mind might begin to know itself, but this deeply spiritual scientist, a palaeontologist, was sure the trends of evidence for this direction and this "Omega" point were clear. Much later, chance brought me the opportunity to look for indications of Teilhard's noosphere with the tools of science. The full story[2] is too long to tell here, but the research has implications for how we view ourselves and what we might be doing to manifest our potentials. I believe there is a growing global consciousness and that we should work to shift it toward a living global awareness.

In the mid-1990s I began developing an instrument that might be responsive to special moments of mass consciousness in which large numbers of people feel shared emotions. Great events on the world stage sometimes bring us together in something approximating a global consciousness, a faint suggestion of noosphere. We attend in our millions to occasions like the Kumbh Mela or New Year celebrations, and we're brought together in witness to horrifying terrorist attacks or massively destructive earthquakes. Our compassion is aroused by the death of major personalities or tragedies befalling our neighbours.

The Global Consciousness Project (GCP) instrument, which comprises a world-spanning network of random number generators (RNG), normally produces a swath of truly random data. But during such global events, we observe structure in the data where there should be none. This network has been in place since 1998, and its output is a history of random data we can compare against the history of major events which focus our attention and synchronize our emotions.

Let me proceed by giving one exceptionally powerful example, the terrorist attacks in New York City and Washington, DC, September 11, 2001. The data changed significantly, showing anomalous correlations between research quality RNGs separated by global distances. Multiple statistical measures by several independent analysts all showed persuasive indications that the network activity was not random on that day and indeed for as much as three days beginning early on the 11th[3]. Similarly clear and instructive effects have been found for other cases in a long replication series of 500 formally specified hypothesis tests assessing the correlation of our data with many kinds of events in the world. All together, the aggregation of data shows trillion to one odds against the deviations being just chance fluctuation.

The GCP response on 9/11 was so powerful and persuasive that it brought out the entrepreneurs, who saw a chance to make big bucks on "terrorism detectors." They interpreted suggestions of a precursor response, with the data making a strong inflection four hours before the first plane hit the towers, as a tool for predicting other disasters and giving a warning to allow prevention or mitigation. But in fact, even if our GCP system showed a big spike of activity, the only workable message would be that a major event might be coming soon. Interest waned when the entrepreneurs finally understood that a big spike in the data might reflect either positive or negative happenings, and that even if it was unmistakable, we would have absolutely no idea what it represented, or where it might be. The detector flurry was a good example of the difficulty science has dealing with wishful thinking, which often overwhelms objective evidence. More important, this over-optimistic response to one aspect of the data was also a distraction from more general implications. The results hold useful messages about human interaction and interconnection.

We are not finished asking questions and seeking answers in continuing analysis of the data, but we should be comfortable with some straightforward interpretations of the evidence. Although some researchers believe the effects we see may not be from mass consciousness but a form of observer or experimenter effect, the array of indications is better aligned with explanations based on something like an "information field" generated by masses of people whose thoughts and emotions become coherently synchronized by events.

As I was working on experimental designs for the GCP I envisioned a faint, developing interconnection among people, which would be global in scope, and which might be reflected by effects on RNG data. It seemed reasonable to refer to this as a "global consciousness" (GC) even though it was unlikely that we could be aware of the necessary interconnections, and even less likely that the GC would be actually "conscious" in the normal usage of the term.

For us as individuals, the existence of this inchoate entity and our possible participation in it would be unconscious and inaccessible. For the new global entity, an actual "consciousness" would be similarly unlikely and unmanifest, at least in any way we might perceive. Nevertheless, the search for evidence of something in this domain seemed worth pursuing, and the resulting 17-year experiment has yielded remarkable food for thought[4]. Some of the implications are quite clear, while others remain speculative or tentative, but it is worthwhile to list some that seem most prominent. Without much in the way of explanation, here are some reasonable statements about what this research implies. These ideas and conclusions are supported by other research in various ways, but I see them as directly evident from the GCP results.

- Consciousness has presence in the world
- Consciousness is extended and non-local
- Humans are connected at a deep level
- Mind can have effects we have not imagined
- Cooperative intention has consequences
- When we are coherent we create a Noosphere
- It is time to accept oneness as modern wisdom

ORDERLY MIND STUFF: THE BEGINNINGS OF A THEORY

Overall, it seems most consonant with the complex of results to interpret the anomalous structure as evidence that there is something like mass consciousness, or what we're calling global consciousness, which exists in a faint but detectable form. With our limited detection capabilities we cannot be certain whether it is momentary and fluctuating or instead may be persistent. If we could make that distinction it would tell us the difference between a few flickers of intelligence or something like Teilhard's noosphere. When we look at all the data rather than the subset corresponding to specified events, we do see statistically significant long-term trends that might represent effects of a weak, continuing mass consciousness. But the primary and scientifically robust evidence is from the series of formal events that comprise somewhat less than 2% of the time we've been running the experiment. Whether the source of our anomalous correlations is persistent or not is an important question we need to ask in future work to learn more about a global presence of mind.

Suggestions like those made in many intellectual and cultural traditions, that there is an Earth consciousness, appear to have a modicum of scientific support in the GCP results. Similarly, the idea of a large-scale group consciousness, potentially engaging whole populations, gains some credence. At the very least, these results are consistent with the idea that a subtle linkage can exist between widely separated people, and that we may be linked on a grand scale by something like a consciousness field. We seem to have captured a faint indication that Teilhard de Chardin's vision of our destiny is beginning to manifest.

If we read the great books and poetry, or look and listen to great art, it is clear that humanity has long

since begun to exhibit its global destiny. Even though we cannot easily see it, there is an intertwining golden braid of great beauty that links our cultures. We have a poetic history, and that is where we will find our future. We need to appreciate our human qualities, and the nearest, richest source for that is what we call art. As Lewis Thomas said, if we want to know about consciousness, we ought to listen to music[5]. More specifically, he said listen to Bach. But each of our major cultural streams has its own Bach, and at this moment in history these streams are mingling and we are on the verge of understanding how much alike we all are. From there it is a small step to begin a global dance. We still need the communication channels of electronics and airplanes, but these are creating a common language and bringing us face to face with ourselves.

We are, in the most personal sense, orderly mind stuff. The aspect of myself that "I" refers to is made of something different from matter and molecules. This is an experiential fact, and it deserves attention because we don't quite know what to make of it; we don't yet see how to benefit from knowing what mind is – and is not. But for the moment, talking about and studying the greater mind of global consciousness, it is enough to know that this orderly mind stuff can interact, not only with other mind stuff, but with our curious machines. The random event generators create a roughly textured page on which the mass mind can impress a message. We would like to understand this better and have a theory to explain orderly mind stuff, but we will have to learn much more to formulate adequate questions.

Many people ask, "Well, what do you mean by the term, consciousness? Don't you have to define that first before presuming to study it, and the more so if you want to study something you call global consciousness?" It is a fair question, though I think we have to recognize the slippery nature of definitions, at least those put into words. Why? Because, to paraphrase Wittgenstein, "Language bewitches intelligence." He meant that when we put language on some object we think we have captured it and properly defined it – but we don't recognize the fact that what I hear you say may be and usually is coloured by my personal experiences and motivations. But we can give it a try.

Consciousness seems to result from a coalescence of connections among the elements of brain and its context. We must include mind in the equation, to represent the ineffable but inescapable personal experience. Consciousness is created (or perhaps it finds a place to touch down) when coherence develops in an otherwise chaotic, random flux of subtle chemistry and faint electrical signals. Ordering influences may be external agents and operators, and they also may be internal, self-organizing principles. Consciousness is a hugely complex confluence of seemingly disparate elements to make a singular entity that lives in both the physical world and an abstract universe of thought and imagination.

> The essence is order, pattern, structure, and ultimately, meaning. The metaphoric confluence can be extended in most any domain. Consciousness can be small and simple, like what we would imagine for mice, birds, snails, and bacteria. It can also be stretched mightily, to help think about forests, oceans, flocks, herds – and groups of people. And, of course, it can be extended to the world, where we can apply the metaphor on multiple levels, ranging from crowds and cultures, to all living beings, to Gaia herself. In human terms, consciousness is usually associated with being awake and aware, possibly even self-reflective. Because we are here looking at a broader set of possibilities, our usage necessarily implies also the unconscious and subconscious aspects of the organized activity that defines the mental world.

PUTTING CONSCIOUSNESS TOGETHER

Is it possible, even without a fully satisfactory definition of consciousness, to go beyond the individual and speak of combining or melding together two or more minds? In personal experience and poetry, there is an especially apt candidate. When two people meet and share a kind of recognition that develops into what we call love, they create something new. The two become one in ways that are recognized by others as well as by the couple themselves (itself?) There are many mundane ways for this shared consciousness to manifest, and in addition there are some that suggest interconnections operating at a level we can't access normally, even though we may perceive something of their effects.

Let's consider more than two – groups of people who may be functioning with a common interest and focus. When we're part of a group that really comes together and begins to resonate and become coherent, there is a change that only becomes apparent if we step back. Of course doing so interrupts the coherence in some measure. Indeed the observation of group consciousness when it is powerful or profound is typically retrospective. We say that was a really good meeting, looking back to see it was creative and collaborative to an unusual degree. We shared in a new thing, an independent group mind, for a while. This is a subjective

and personal observation, but it seems to be confirmed in data from the FieldREG, protocol[6] to study group consciousness that was a stepping stone leading to the GCP.

Data recorded when people feel they are part of a group that becomes deeply integrated shows some structure. Actively creative groups, ritual activities in sacred places, truly captivating music, any deeply engaging shared moments tend to manifest departures from expectation in what should be random data. Thus, group consciousness produces small, but significant changes in the data. The mental coherence of a group appears not to be internal, confined to the individuals, but to bind them together and even to include somehow the RNG. We find structure that is evidence of coherence within the data sequence in the form of small but detectable correlations, which are shifts away from purely random behaviour. The changes are strongest when the group is most integrated and most completely absorbed.

GLOBAL AWARENESS?

There is almost a sensual longing for communion with others who have a large vision. The immense fulfillment of the friendship between those engaged in furthering the evolution of consciousness has a quality impossible to describe. – PIERRE TEILHARD DE CHARDIN.

The next level, with participation by large numbers of people in a shared experience, is even more difficult to define. And yet, although we haven't much ability to recognize that we are part of a mass consciousness, it isn't hard to grasp the notion. Just as we can reflect on the group consciousness experience and retrospectively note its power, we also do see the common emotions and sharing created by great tragedies. I think we are even able to identify the potent connections based in emotions like compassion linking us to vast numbers of fellow humans whom we don't know and will never meet. When the news is full of a major earthquake, or yet another suicide bombing that brings great suffering to people, there is an outpouring of deep feeling, of connection with the people who have lost loved ones. Even without thinking, we shift a part of our consciousness to their tragedy, and we give them unspoken love and we share a deep sadness for their troubled time. That movement of thought and emotion is profoundly human. We are creatures of compassion and thus we are interconnected in our unconscious responses and reactions. That interconnection is worth our attention, for it is a defining human quality, which is the foundation of a global consciousness and awareness.

The idea of a great composite mind exists in virtually all cultures and times. But it isn't a scientific construction, so in working toward actual research that might reveal something of its possible nature we made an "operational" definition of global consciousness which predicted correlations in our random data during moments of synchronous collective emotion shared around the world.

And that is what we have found – departures from expectation, which happen just when we come together, sharing experience and emotions, becoming one great organized observer – a global consciousness. The next step is for us to take this oneness, which at this stage is essentially accidental, and turn it around to be intentional, collaborative, creative, and effective. We are just at the edge of becoming evolutionary entrepreneurs, ready and able to decide what future we will have, what we will become. We are creating our future now, but accidentally, unconsciously. It is time for us to take over.

LET'S GET PRACTICAL

Do synchronized emotions touch the physical world? Let's do a recap to look for an answer. Based on laboratory and field experience, we built an experiment to gather evidence of mind-matter interactions on a global scale. The idea was to create a monitoring system that could register consciousness effects using random number generators in a network with nodes around the globe.

The formal scientific experiment uses a two-level hypothesis, with a general statement of the question tested in a series of specific hypotheses applied to particular events. The combination across all formal tests of the general hypothesis shows that what we're calling global consciousness is linked to small but ultimately significant correlations among the RNGs in the network. This is an anomaly because these devices are designed to be truly random and moreover are separated by great distances. But they do become correlated. The odds against chance for the GCP's composite result are more than a trillion to one ($p \sim 10\text{-}13$). In addition, and arguably more important, an ongoing program of deeper analysis and modelling produces enlightening results[7].

The analyses have revealed several measures of structure in the data beyond the primary discovery of nodal correlations. We see characteristic variations that depend on distance, and the slow development of effects over time suggests the dimensions of a global consciousness moment. We discover that effects are larger when people are awake, which is an unpredicted but eminently reasonable result[8]. In addition, categorizing the events by quantifying some aspect or by rating

the presence of some quality yields sensible differentiation. For example, important events judged to engage hundreds of thousands or millions of people show stronger effects than those at the other end of the scale.

More subtle and subjective issues can also be addressed with reasonable clarity. We can ask about the level or strength of emotions characterizing the event, and, not surprisingly, the higher the level, the stronger the correlations in the data. We can go further in this direction to test the power of various particular emotions[9]. One of the best examples is compassion. People can reliably rate the events as embodying or evoking compassion, and when we calculate the associated effect size, the result is clear. Compassion is a powerful determinant, so that events characterized as strong on this dimension produce significantly greater correlation. This is an interesting and important finding because the defining quality of compassion is a local and familiar model of what we hypothesize might be the source of the GCP correlations. Compassion is by definition an interaction, an interconnection, between two and sometimes many people. Compassion happens when people share deeply, touching each other emotionally and melding together around a felt commonality. This is a good description as well of the interconnection generated by events that produce the correlations we see in the GCP data.

While there is room for different interpretations, for me the meaning of our slight departures from expectation in data that should be random is quite clear – human interconnection happens. Mostly this goes unnoticed, however, because we are usually much too busy with our individual stuff, the things that make our lives "real" even if we are somewhat unconscious about it. We are usually preoccupied, captured by what needs to be done, or by entertainments brought to us by media and sought by us in games and theatres and sporting events. But sometimes it is very different. Once in a while we are taken by surprise out of the regular run and into a common path with others, by a great catastrophe or an accident that rouses broadly shared attention and emotion. Or we go deliberately with millions of others into a shared celebration, or a ritual observation of a moment or a day. In these "different" moments shared with great numbers of other humans near and far, we escape the personal and enter the common ground of our fundamental nature.

A SINGULAR PERSPECTIVE

Although I claim to be an empiricist and not much given to theoretical speculation, people ask how it all fits together, and it turns out that I do have some well-established opinions. Of course I have been thinking about formulating good questions in this difficult border domain for a long time, more than 35 years. I have a collection of personal experiences like those of many people who meditate and people who have surprising personal episodes of "anomalous" communication and striking runs of "luck." In addition, I've been doing hands-on research developing a broader view of human consciousness since 1980 in the company of bright and thoughtful people. I don't have any doubt about the phenomenology we're touching here, because of direct engagement in the entire process of experimental design, data collection and processing, and interpretation of results.

The Global Consciousness Project is an effort to capture some faint indications of a true global consciousness. Its purpose is to examine subtle correlations that appear to reflect the presence and activity of consciousness in the world. Just as the biosphere is composed of all the organisms on Earth and their interactions, Pierre Teilhard de Chardin postulated that the noosphere would be composed of all the interacting minds on Earth. What he encouraged us to envision is a transhuman consciousness emerging from our interactions to become a guiding intelligence for the planet. Scientific evidence documents our subtle but profound interconnections, and it may be that as our unconscious links mature, humans will grow into a role like neurons in a global brain, creating an intelligence for the earth – a global mind.

Evolution starts with particles that coalesce to become atoms and then simple molecules that merge to become enormously complex molecular structures. These become life building blocks from which smaller and then larger animals emerge, and eventually you have us: self-aware animals. While that has been quite a run, it's not over. There is at least one more stage, in which we become a new organ of consciousness for the earth, evolving into something analogous to the cerebral cortex in humans. We can, and to survive I think we must, engage in conscious evolution to decide and then to create what the future will be.

My favourite picture is that we are all already participants in a giant interaction, similar to that among the neurons in a brain. The neurons don't know anything about the mind or the questions we ask, or what consciousness is, but they participate anyway by doing perfectly what neurons do. I think we are participating in something that is a higher level of consciousness and that for all we know, could even be conscious and self-aware. Like the neurons, we don't need to know anything about this; we only need to be developed humans doing our job, manifesting our humanity.

Consciousness has a creative, productive, generative role in the world such that what we wish for is more likely to happen than if we hadn't wished for it. We have good evidence that this is true. What we envision together will manifest in the world in a subtle way. This means that we have an enormous, untapped (or at least uncontrolled) capability of changing the future. The corollary is that we also have a responsibility. Succinctly put, we have the capacity and the need to change our world so that the future is brighter. Doing so depends on coalescing into a greater consciousness.

When rain falls on a mountaintop it creates rivulets that flow together and become streams. They wind down the mountains and join to become rivers, and the rivers eventually get to the sea. Each of us in our way is such a rivulet, and sometimes we even feel the power of joining others in a stream – of thought, of prayer, of intention. What would it be like to have most people on the earth join in a conscious intent?

The ancients talk about 24,000-year cycles where consciousness wakes up and then goes to sleep, wakes up and then goes to sleep. I think this is a framework in which the global awareness idea might make sense. We can use it as a mirror to look at ourselves in a different way, allowing us insight into the ride we are taking on the universal wave of consciousness. To be clearer, the idea is that we are on the verge of a peak of the wave, the waking part of the long cycle. To take advantage of the moment, we need to become doubly self-reflective – to watch ourselves learning to see our destiny. Our task is to observe and in observing, to foster our coalescence into consciousness. The truth is, most of the time we are asleep. But we can wake up a little bit. That is the promise of global consciousness.

We are not usually conscious at all of our connections to other people, to the trees and birds and animals all around us, but those connections exist. By intention we can become aware of the matrix of life and mind in which we are swimming as a fish swims in water. We want to see and feel the water, the matrix that sustains us. I believe it is time for conscious evolution toward our potential, which means working with as much clarity as we can muster toward becoming fully human.

For those of us with the leisure to write and to read scholarly works it is hard to perceive, but our life on this planet is in a precarious moment now. What we do in the next months and years, individually but also as families and communities and cultures, will either devalue our future or make it bright. We're sitting on a very sharp edge, and we have to make decisions for the ages. What will our grandchildren – what will the seven generations have left to them? It can be beautiful, but I believe that will happen only if we act together in shared wisdom, with charity and benevolence that crosses all the spaces that appear to separate us.

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ERIC REYNOLDS

COLLECTIVE EVOLUTION
AND NEXT-STAGE ORGANIZATIONS

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♦ ♦ ♦

The challenge of our generation is to make a world where everyone has a purpose. - MARK ZUCKERBERG, Harvard Commencement Speech, May 2017.

♦

COLLECTIVE EVOLUTION IS THE NATURE OF THE universe. From the big bang to Purple Rain, all of existence has emerged in an unceasing, cosmically inspired dance. Strange attractors exert an inexorable pull, as the gravity of destiny shapes the flow of creation. As early Helium and Hydrogen soon realized, the music had started and there was no turning back. We have no choice but to dance; how we choose to dance can change everything.

Modern cosmology begins with a bang, after which all the parts of the universe find more and more complex and meaningful ways of interacting with one another. Quantumly entangled, blasted into being from the infinite depths of the quantum vacuum (which *is* living entity), every bit of this creation was paradoxically blown apart, while being inexorably drawn together. Such is the beauty and the quandary of the quantum. So Helium and Hydrogen danced, and heavy metal exploded from the heat of their union.

One way to view this dance is a cosmic dance of complexification, a never-ending drive of perfecting perfection. At each step, from early stars to complex life, deep down, the parts are all the same. The only thing that has changed, over "time," is how we organize. Evolution happens as the manifest forms of reality, with everything from our quantum Planck length bits to our rock and roll riffs being attracted by the Good, the True, and the Beautiful.

And yet, here on planet Earth, the end of times are at hand. The question facing humanity today is whether to continue denying this eventuality, and go out in a blaze of glory, or to step up to our cosmic potential. The collective stardust that is humanity has ushered in the Anthropocene, and we are now at the helm of spaceship Earth. To survive in postnormal times, we must address the wicked problems of a Volatile, Uncertain, Complex, Ambiguous (VUCA) world at peak everything, where widespread social, economic, political, and environmental injustice are colliding amidst the increasing pressures of catastrophic environmental damage and exponential, unsustainable human and technological growth.

It's time to change the tune to which we are dancing. This suggestion brings me to the Next-Stage Organization (NSO), a theoretical human activity system capable of bridging the inherent paradox of these wicked problems. By tapping into the wicked transformative potential of conscious evolution, NSOs add value where once was there was pain. As noted, it all hinges on how we organize. The NSO represents a paradigm shift in organization, a 21st century fractal

expression of the shift from Newtonian determinism to quantum connectedness.

In the following pages, I will outline the characteristics of a Next-Stage Organization, the focus of my dissertation research. I will begin by laying the theoretical foundation with a brief description of Nicolescuian transdisciplinarity, a paradigm shift in the scientific method marked by the shift from the classical to the quantum understanding of the universe. This will be followed by an exploration of the various fields which form the building blocks of an NSO, namely adult development theory, organizational development, and sustainability. If all works out, the NSO will be assembled, and we will dance to a different tune, one that privileges Earth and humanity.

THE SHIFTING NATURE OF REALITY

Modern science and the mainstream scientific method assume a single layered, observable, material universe, reducible to its constituent parts, behaving predictably in a linear fashion, and ruled by natural laws and by cause and effect, where knowledge is a pre-existing, discoverable aspect of reality that is independent from the observer. This worldview might be attributed to the three, roughly 400-year-old, axioms of Galileo Galilei. They are:

1 ~ There are universal, mathematical laws.
2 ~ They can be discovered by scientific experiment.
3 ~ Such experiments are perfectly replicable.

This worldview, or paradigm, sometimes referred to as classical or Newtonian, catalyzed the blossoming of the Modern era. It also cut *spirit* right out of the picture, throwing thousands of years of inner wisdom practices out with the bathwater, so that now, the flower of Modernity is an invasive species threatening to smother civilization as we know it.

Fortunately, for the past 100 years or so, a new paradigm has taken seed and is now beginning to blossom. This is the quantum paradigm. Ironically, or perhaps precipitously, quantum theory was developed as the pinnacle of the classical paradigm, which led to the beginning of its end. The end may seem slow in coming; however, in the waning years of the 20th century, Basarab Nicolescu offered an updated set of axioms, bringing quantum understandings into the scientific paradigm. They are:

1 ~ The ontological axiom: There are, in Nature and society and in our knowledge of Nature and society, different levels of Reality of the Object and, correspondingly, different levels of Reality of the Subject.

2 ~ The logical axiom: The passage from one level of Reality to another is ensured by the logic of the included middle and the mediating action of the Hidden Third.

3 ~ The complexity (epistemological) axiom: The structure of the totality of levels of Reality or perception is a complex structure: every level is what it is because all the levels exist at the same time.

These axioms honour the multilayered reality implicit in a quantum universe, as well as include the observer back as a fundamental piece of the equation. This multilayered reality is also interdependent, meaning no level of reality is in charge, and all levels affect the rest. Individuals, let alone organizations, are literally cosmic actors. As this is an article about organizations, I will not go deeper into this here, especially as some of the other authors in this edition will explore the nature of the universe in far greater depth.

Important here is that Next-Stage Organizations are in tune with this quantum paradigm, aware of the interdependent nature of life and reality, and sensitive to collective evolutionary purpose. Operating from this perspective, adding value to all stakeholders, and fostering development at all levels, becomes part of the operating system. These organizations are the *next stage* of how to organize. They create evolutionary solutions to wicked problems by embodying emergent solutions found by exploring the Hidden Third, relying on information outside of conventional thought, and relying on self-management, wholeness and evolutionary purpose to get them there.

ADULT DEVELOPMENT

Humans, like everything else, will evolve over time, given the right conditions. The ancient wisdom traditions have extensively catalogued the states and stages of inner spiritual growth a human being can achieve over the ages, information that was largely suppressed by the classical scientific paradigm. The task of the new paradigm is to integrate this internal knowledge with the outside, scientific knowledge (what transdisciplinarity calls, respectively, the Subject with the Object).

The beginning of the western scientific exploration of adult development, starting with James Mark Baldwin, marked a paradigm shift in this direction. Not surprisingly, as with the evolution of humans and society, his contributions to thinking in both psychology and the epigenetics (nongenetic sources) have taken as long as quantum theory to catch on. The good news is that the seeds of paradigm shifts

are as resilient as they are profound, and the adult development field began to blossom towards the end of the 21st century.

Adult development encompasses a broad body of research, which shows that humans can develop in various lines of development throughout life, moving through predictable, sequential stages, transcending and including one another with increasing degrees of complexity. Some of the top researchers in this field can be found in this issue. Readers may also choose to refer to the references below for a more expansive treatment of the subject.

Important to note here is that the Modern belief system comes out of the middle of this developmental spectrum, what Jean Piaget referred to as the *Formal operational stage*, usually achieved between the ages of 11 and 20. People's adherence to the formal stage is part of the double edged sword that maintains the status quo and keeps change at bay, as the system inherently resists paradigm shifts because they are inherently destabilizing, coming from what has been termed the *postformal* stages of development.

POSTFORMAL THINKING

The postformal stages reflect gaining deeper understanding, recognizing assumptions, seeing whole dynamic systems, stripping away illusions, and transforming oneself and creating conditions for others to transform. At best, less than 15% of the current adult population can be considered having attained a postformal level of development, with the numbers closer to three to five percent when considering the more complex end of the scale (i.e., the later stages).

Paradigm shifts are the realm of what is called the postformal, being stages of development beyond the formal operational stages described by Piaget. These stages of development are important for the transformative leverage they represent vis a vis current systems, such as the economy and education, especially if solutions are to be found to intractable wicked problems related to the most disadvantaged persons across the globe. Postformal levels of thinking and being have been alternatively labeled (a) 2nd tier, (b) self-authoring or self-transforming, (c) post conventional, as well as (d) colloquially-termed Teal.

Almost all paradigm changes involve resistance, mainly from two sources. First, resistance comes from developmental directions, in that those at conventional stages are trying to adhere to social norms (resisting change). Second, it manifests as the resistance of early postformal thinkers to later stage explanations of their own thought structures. Both forms of resistance can be remedied when postformal thought leaders learn to filter their communications through their own embodied understanding of the earlier stages, which involves strategically relearning and using these earlier ways of thinking and speaking. Furthermore, cultural support is necessary to foster these more complex stages, leading to progress in the social and scientific realms.

The proposed movement to more complex stages does not mean simply that later stages are better, or that transitioning all human beings and human activity systems to worldcentric worldviews and capabilities is necessary, desirable, or even ethical. It is, instead, a recognition that a small but critical mass of networked leaders, leading with a concept of leadership as a relational context of facilitating potentially developmental interactions, could provide the guiding light, or the strange attractor, to achieve socio-cultural coherence. The concept strange attractor refers to chaotic behavior that can lead a system forward in evolution. As the harmful impulses of individuals and organizations at earlier stages are checked, and creative potential is fostered by able leaders empowered by worldcentric social systems, new ways of being, doing, knowing, and relating have the potential to flower for the benefit and enjoyment of all.

A theoretical future society operating at a later postformal stage of development would functionally care for all people, while functionally building humanity's biological, sociological, and cosmic imperative for evolution into the structure of society. To make the transition, transdisciplinary measures, which are designed to simultaneously produce solutions to wicked problems, such as addressing humanity's adaptive challenge to things like climate change, must induce conceptual change. The latter is concerned with the process by which people's central organizing concepts change under the impact of new ideas or new information.

ORGANIZATIONAL DEVELOPMENT

One need not look far to see the effects of human civilization on planet Earth; in fact, there is no longer anywhere on earth one can go and not see the effects. No single species on this planet that we know of, since cyanobacteria catalyzed the Great Oxygenation Event over 2 billion years ago, has had a greater impact on earth than have humans. Although individual humans have and do make monumental, even paradigm shifting, contributions, which have shaped human civilization, it is in the evolution of how we organize and the ability to leverage mechanical labour that ushered in the Anthropocene.

The Anthropocene is the first geological epoch where a single species (in this case, humans) effects the environment on a global scale. Ironically, this impact reflects the successes of Modern science, technology, and organizational development, mostly over the past 100 years. Even more ironic, exponential growth in fragmented knowledge, and its application through technology, will not be enough to change the course that has been set, as overcoming blindness to our own systemic complicity is the main lever for social transformation. Without the benefit of integrated, transdisciplinary knowledge, these paradigmatic blinders will stay in place. The separation of science and philosophy, marked by Newtonian thinking, and the rise of disciplinary knowledge must be transcended and included, bringing together that which can be measured and that which cannot.

Current organizational models, like current educational systems, were created explicitly to prepare humans for a socialized existence that rewards people for fitting into the machine, not for fostering creativity. Such is the form of our organizations and our economies today, based largely on Taylor's notion of Scientific Management, prevalent at the beginning of the 20th century (i.e., improving economic efficiency and labour productivity). In other words, social and management sciences have, from a systems perspective, largely envisioned humans and organizations as closed systems, with employees working as isolated cogs in a larger machine. This either/or polarization of reality has led to separation, which has led to degradation; the externalization of costs, moralized by Friedman's doctrine of responsibility to shareholder profit, has led Modernity to the brink. Wilson (2016:15) recently asked, "Will we continue to degrade the planet to satisfy our own immediate needs, or will we find a way to halt the mass extinction for the sake of future generations"?

The arch of the organizational development field shows that how we think about things affects how we interact with them. Modern society was designed to create formalized workers; creativity, let alone post-formal exploration, becomes a threat to the well-oiled functioning of the machine. Contemporary education, as well as current organizational models, tends to promote socialized, conventional ways of being. Also, in a specialized (machine-focused) society, most people are not afforded the opportunity to practice complexity; however, the successful completion of complex tasks is necessary for thinking to evolve. This necessitates ways of organizing which foster, as well as utilizes, the postformal stages of development.

Fortunately, development, be it individual or organizational, need not take decades and be a rare occurrence. Development is a function of life conditions, which continue to change drastically. We are all becoming connected, with each other, with all of knowledge, and with ourselves (whether we know it not). Now we *just* need a collective vision, a planetary path accessible to all. Not only is this vision possible, but necessary so that all children (our potential managers and leaders) can be ecologically educated and economically empowered, now, within the next three years. In this vein of thought, it will become the operational purview of all organizations to tend to such education, as existing educational systems are clearly lacking.

'Later stage' organizations have the potential to become the carriers of the new social DNA, embodied manifestations of an evolutionary way of being that transcend yet include the current paradigm. As these cultural imaginal cells proliferate and network to one another in an emergent ecosystem of resonant organizations, they can cross boundaries and introduce new patterns, which the dominant system can no longer resist once a tipping point is reached. Considered at first to be outliers, these imaginal cells can be conceived as an immune response foreshadowing the next stage of human evolution, a stage where we take an active part in the evolution of our planet, our species, and all species. However, like any journey of import, in order to take an active part in where we want to go, we must first come to understand where we are at, organizations included.

THE NEXT-STAGE ORGANIZATION

Given the state of humanity and the environment in the Anthropocene, organizational solutions capable of providing value-adding goods and services that benefit all stakeholders represent emergent solutions that transcend and include current contexts. A Next-Stage Organization (NSO) becomes an organization able to provide a good or service *while* adding value to *all* stakeholders (more recently called stakesharers). The NSO becomes a *holding environment for transdisciplinary commerce,* which requires unprecedented global synergy and cooperation. Transdisciplinarity holds that new knowledge is born in the tension between the apparent paradoxes of being a healthy organization in an unhealthy system. The new science notion of tension is that it holds things together as they evolve, rather than pushing them apart. In other words, social change is, by its very nature, an ongoing, transdisciplinary phenomenon. By acknowledging and fostering this perspective, the Next-Stage Organization becomes a leading force for social change, which has planetary and humanity implications.

We know that humans, as well as other living systems, develop through stages of complexity. Evolution is not solely a biological phenomenon; it the fundamental nature of the cosmos. In our society, human capital is generally underutilized when addressing most problems, despite the positive emergent effects of involving everyone. Including the environment as a stakeholder adds to this value added stance, but most organizations, like most people, are likely at mid-to-late conventional stages of development, given the relative rarity of postconventional people at this time. This developmental stage means there is currently no place for integration, environments, or complexity when it comes to problem posing and solving, at a time when their combination is urgently needed.

Postformal orders of development indicate a cusp in which an individual becomes acutely aware of the socially and cognitively constructed nature of reality, one in which the alternating stages of discernment and integration, which are inherent in development, begin to have a layer of intentional creativity, and the interconnected nature of all levels of reality becomes more apparent. Next-Stage Organizations, like transleaders (transdisciplinary leaders) who recognize leadership as a co-created act, add value as emergent solutions to wicked problems become competitive advantages in the genesis of a thriveable planetary culture.

NSOs are organizations that can *hold space* for members with differing developmental trajectories, skills, and backgrounds, so they can collaborate across current socio-cultural-technological divides to find emergent solutions to wicked problems. This work could be considered to be making meaning in a more complex fashion than business as usual. Such an organization can unlock the minority's best thinking, which tends to get buried under office politics by the least common denominator (in formal-stage organizations).

NSOs would create emergent knowledge, which is fostered, instead of repressed. It is alive and always changing because those co-creating it are alive and always changing. In other words, if a self-transforming human mind can change itself, then a self-transforming organization should be able to become a lever that can change society (because organizations, although living systems themselves, *are* lead by humans). Complexity thinking holds that all parts of a system are interrelated. As an organization constructs a dialectical identity, self-organizing with purpose by adding value and building community, it builds momentum towards a systemic upshift (to higher, more complex and inclusive levels).

Resultant *next-Stage* structures would expose individuals to each other in increasing depth, allowing the group to include and transcend individual growth. At the same time, they would seek to continuously add value to self and to society as a whole, leveraging evolutionary purpose as a competitive advantage. This developmental cusp marks the transition to a more holistic and interconnected, and less egoic, interpretation of transdisciplinarity's multiple realities.

Given the oppressive nature of current hierarchical systems, in the context of a global economy on the brink of ecological ruin, organizations are drastically needed that are explicitly transforming self and society by providing products and services in a way that is healing ecological, psychological, and sociological ills. A Next-Stage Organization is formed with the realization that striving for wholeness is an evolutionary right for all life, and should be the organization's purpose. As such, all life is also imbued with an evolutionary purpose to be beneficial to the whole. In other words, social justice, a concern for the human condition, and sustainability must become the purview of organizational development now that we have entered the Anthropocene.

SUSTAINABILITY IN THE ANTHROPOCENE

Sustainability refers to the need to live within the natural limits of one's environment without compromising the future, recognizing the reality that current global life conditions include increasing environmental degradation and exploitation of nonrenewable resources that are far outstripping realistic future supplies. Human history clearly shows that it is normal for civilizations to crash once they grow beyond the carrying capacity of their surrounding environment. This information is not new. The Intergovernmental Panel on Climate Change saw this as an imminent threat a quarter century ago.

And yet, climate change is still a politically debated meme, an intersection of an entire checklist of threats to the longevity of human civilization. This is because the majority of humans have yet to adapt to the reality that our actions directly affect the environment, known as an adaptive challenge to climate change. Associated with this interminable debate is the term sustainability, defined as the ability to live within ecological limits in such a way that life conditions are not adversely affected, now and in the future. Transitioning to sustainability requires overcoming the adaptive challenge to recognize human behaviour as the cause of environmental degradation, which necessitates cultural progress, global evolution, and a new dance.

Evolution is a moving target involving maturity, with maturity defined as coming into balance with

one's individual and collective purpose. Consider the collective actions and agreements made at the 2015 *Paris Conference of Parties* (COP21) conference about climate change, which were at once historic and at best just enough of a step in the right direction with no room to falter. These collective actions must become minimum operating conditions for all organizations if life is to be preserved.

In start-up companies in general, and stereotypically the tech industry in particular, human resource (HR) policies explicitly cater to Maslow's entire hierarchy of needs. However, for true self-actualization (the top level), the *entire* system must transform. Thus, organizations, not to mention entire industries, nations, and continents, must begin working toward the same common good - to transform the entire system. A system-wide, paradigmatic shift is required.

Between current technologies and the emergent potential of collective action, a plethora of solutions exist. Ultimately, however, the problem of sustainability is a *human* problem, the greatest challenges of which are socially constructed. In other words, "only a major shift in moral reasoning, with greater commitment given to the rest of life, can meet this greatest challenge of the century" (Wilson, 2016: 207). The good news is that the shift has already begun on the grass roots level where local sustainability initiatives are becoming prototypes for the potential inherent in a globally connected, postformal society. Even better, these localized initiatives mark the beginning of a move towards a truly regenerative culture. Complexity theory holds that a small, local, well-leveraged change can transform entire systems.

CONCLUSION

It takes a while for people and systems to evolve, genius to become commonplace, and the wisdom of the sages to become the common sense of the ages. That's what my doctoral research is for. The possibility of a Next-Stage World doesn't mean everyone is automatically postformal; it means everyone is respected and has an honoured place, with the potential and the opportunities to effect transformation and paradigmatic shifts.

As well, the system itself needs to evolve past the conventional, if civilization as we know it is to persist. Reason and spirit must be brought back together, integrated into a rich, integral whole. Transdisciplinary initiatives, with environmental and social justice as axiological addendums, are necessary to address our collective shadow. The overall red thread of this narrative has been the need for not only individual shifts, but an entire organizational and societal shift from Newtonian to Quantum thinking and being. This shift includes the understanding that all systems (including organizational systems), although inherently resistant to change, must remain *open* to change, transformation and self-organization in chaotic, strange attractor contexts, if they are to survive.

Right now, humanity is an angry, misled adolescent with no adult guidance, facing a Gordian Knot of intertwined wicked problems, where the solutions to any one of them already seems impossible, despite that most of them pose a potential threat to civilization as we know it. These threats also represent infinite wicked transformative potential, and it is within our grasp. Now it's time to rock the evolutionary dance!

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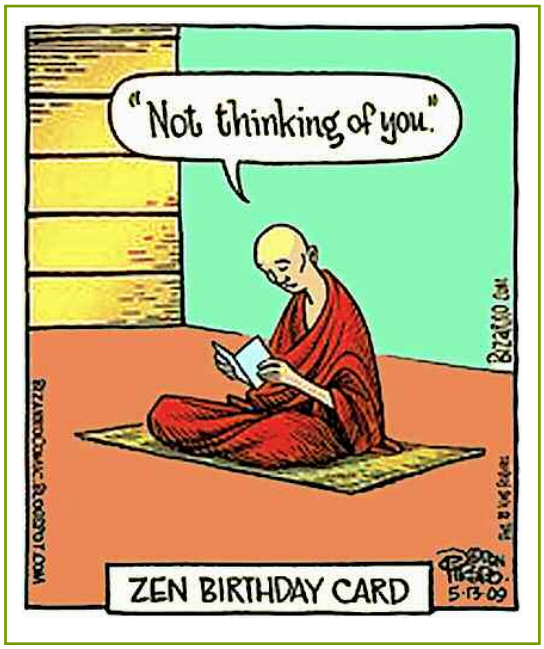

It is the task of the enlightened not only to ascend,
but also to be willing to descend again and to share.

Plato

It is only by grounding our awareness
in the living sensation of our bodies that the 'I Am,'
our real presence, can awaken. G.I. Gurdjieff..

Gurdjieff

Knowledge is not the base of enlightenment,
enlightenment is the base of knowledge.

Maharishi Mahesh

⊙ ♦ ⊙

ALFONSO MONTUORI

THE EVOLUTION OF CREATIVITY
AND THE CREATIVITY OF EVOLUTION

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♦ ♦ ♦

In strange and uncertain times such as those we are living in, sometimes a reasonable person might despair. But hope is unreasonable, and love is greater even than this. May we trust the inexpressible benevolence of the creative impulse. – ROBERT FRIPP.

♦

INTRODUCTION

ENLIGHTENMENT HAS LONG BEEN THOUGHT of as an individual process. Much like creativity used to be the province of the lone genius, enlightenment was the province of the individual sage. But our understanding of creativity is evolving, and I believe our changing understanding of creativity may shed some light on the emergence of a new understanding of enlightenment, a more collective enlightenment.

Many discussions of creativity start by pointing out what remarkable and fascinating phenomenon creativity is. There usually follows a list of equally fascinating great geniuses. I agree – creativity is fascinating. But I have to confess that I have never been terribly interested in the nature of genius, or discussions along the lines of whether there was anything really special about Einstein's brain. It's not that I think genius is uninteresting, but there's so much more about what we call creativity that's worth exploring. In fact, most of my attention has been directed to the aspects of creativity that haven't received special attention. Somewhat more esoterically perhaps, I've also been interested in how we have created our understanding of creativity. Because our understanding of creativity is, after all, also a creation. Now this may seem to verge on the esoteric or at least the suspiciously academic, but I'll show that the implications are considerable.

My argument here will be that creativity is evolving, meaning at least that human beings construct an understanding of what this thing or process is that they call creativity, and that this understanding changes over time. We are now at an important turning point where our understanding of creativity is undergoing a considerable transformation. During times of transformation, it's important to get a good sense of where we've been in order to get a better sense of where we could be going, and to avoid the embarrassing and potentially dangerous possibility of thinking we're changing when in fact we're just doing the same old thing, and making the same old mistakes. Let's at least make some new mistakes, don't you think?

I have found studying creativity is interesting for many reasons, not least, perhaps, because everybody I speak to seems to have an opinion about it, and that opinion tells me a lot about the speaker. Creativity also taps – for starters – into such rich veins as the relationship between innovation and tradition, the individual and society, freedom and authoritarianism, process and essence, and more broadly the very stuff we're made of, and the central metaphor for what life, the Universe and everything is all about. In these pages, I hope to share some of my excitement with you and give you as hint of what the implications of this expanded view of creativity are.

OF MACHINES, GODS, AND GENIUSES (AND OF WHO AND WHAT WAS LEFT OUT)

The world-as-machine metaphor that dominated the modern era got us to think and act in uniform and standardized processes as machines do. But this is not the way of the natural world. Nature is biased

in favour of diversity. And creativity is itself an act of diversity (Fox, 2004: 44).

Many years ago, when I first began reading up on creativity, as well as talking to non-specialists about my interest in creativity, I was fascinated by the findings on the psychological characteristics of the creative person, and the nature of the creative process. But I was also struck by the fact that there was no research on creative groups, or on creative women. Growing up playing in a variety of musical groups, the lack of research on creative groups was puzzling to me. Even more puzzling was the response to my interest in the subject from both specialists and laypeople: creativity always comes from individuals, I was told, never groups.

As for women, here's the noted psychologist Hans Eysenck (Eysenck, 1995: 127) on the subject: "Creativity, particularly at the highest level, is closely related to gender; almost without exception, genius is found only in males (for whatever reason!)."

For whatever reason! Well, being a psychologist, he clearly didn't venture outside his own discipline to look into the way women had systematically been prevented from participating in the activities in which one could get recognition for creativity, (Eisler, Donnelly, & Montuori, 2016). As a psychologist, Eysenck did not take such "social" factors into account, and so his assumption was simply that women were less creative. Or, as the popular perception went, men create, women make babies. Whether in the arts or the sciences, it was really not until the 20th century that women began to participate on an equal footing in a range of noteworthy activities. They had previously simply systematically been denied access to education and participation. Things may have improved, but there are still egregious problems. In Silicon Valley, the heart of the digital revolution women are still being systematically discriminated against (Romero, 2015; Shih, 2006).

The long and the short of it is that our understanding of creativity reflects a lot of the cultural assumptions of the time. Our understanding of creativity had also been created in the context of a particular way of understanding how the world was put together, or what the world was "like." And the world was thought to be "like" a big machine, an image that has penetrated our culture and our thinking so deeply that it still holds sway today, despite challenges and minor modifications (Capra & Luisi, 2014). From Descartes and Newton we inherited the machine metaphor of the world as a giant clockwork. Creativity fit rather awkwardly in that clock world, creative people being notoriously averse to certain types of regularity.

Initially, the assumption was that there was actually a watchmaker, a *creator* God. The closer we got to the 20th century, the more God the watchmaker was elbowed out of the picture. When Napoleon asked Pierre-Simon Marquis de Laplace about the role of God in his work on the solar system, Laplace replied that he had no need for this hypothesis. At that point, human beings were stuck in the role of Gods, revelling in their newfound glory as well as suffering the consequences.

The point is that machines have creators or inventors, and the creator is always outside the machine. God was outside the machine world. The inventor is not in the machine – he or she is always outside the machine. Later, we saw this same principle applied rather nefariously to education and factories, which were also modelled after machines, well-oiled if performing correctly. Schoolchildren learned about the great men from their teachers (who were usually not so great). The great men were creative. But schoolchildren were not supposed to be creative. They were supposed to read about creativity, not do it, let alone be it.

Orchestra conductors ensured the orchestra played the score as envisioned by the composer. But the composer was not in the orchestra. The composer was always outside the orchestra. After around 1800, coinciding with the Industrial Revolution, musicians gradually lost the ability to improvise, to make up their own notes, as they had done before that time (Attali, 1985). The educational system focused only on learning to play other people's music, not making up your own in the moment (only reading music, in other words, not improvising). By the time jazz appeared in the 20th century, with its focus on improvisation, many of its critics seemed to have forgotten – or perhaps never knew? – that what is known as European "classical" music used to involve huge dollops of improvisation, and its greater composers, including Bach and Beethoven and Mozart, had been famous for their improvisational skills . With the advent of the machine world, and particularly with the machine thinking of the Industrial Age, all of that changed, and to "improvise" came to mean something inferior, something one did because the musical score, the notes written by the composer, were not available, or because the musicians were incapable of reading them (the racist criticism made against jazz) (Goehr, 1992; Higgins, 1991; Montuori, 2003).

CREATIVITY, OUR PROBLEM CHILD

Creativity didn't sit well with the machine world, which saw creativity as disruptive and disordered

and not at all machine-like, not easily reduced to a formula or algorithm or replicable or even well-oiled. Creativity was not studied, understood, or really fully appreciated. Science was only interested in order, regularity, and laws. Creativity was the unusual, disorder, the exception and the exceptional, "disruption," as we would say today. Creativity was also considered to be riddled with "subjectivity," rather than objective, and involved intuition or otherwise something that could not be found in pure reason alone and in the sanctity of the scientific method.

As a result, creativity was ignored as too flighty a topic, and ended up in the warm embrace of the Romantics. The Romantics emerged in part out of a rejection of this modern, machine view of the world. In fact, they defined themselves in opposition to machine modernity. If machine modernity was objectivity and reason and intellect, Romanticism was subjectivity and emotion and passion. Creativity became the privileged realm of the Romantics, who exalted it, inhabited it, chased it, lost it, mourned it, and most definitely lived it and described it. The poet Keats articulated the concept of *negative capability*, being able to stay in uncertainty without wanting to grasp for certainty, for pre-existing ideas or categorizations, and preceded the scientific findings of the study of creativity by 150 years or so.

Creativity was considered something extraordinary in the Romantic view, possessed by a very few (who were arguably themselves possessed). In the end it was a rather mixed blessing, because creators were outsiders, largely misunderstood, adored, but also the subject of envy, and scorn (if they were not wildly successful). Only a few of them were lucky enough to reach widespread popularity, and of course, widespread popularity had its own problems.

In the machine world, the creators, and consequently creativity, were not just always outside the machine but also almost always outsiders. *The Outsider*, as Colin Wilson's youthful book on creative individuals was titled (Wilson, 1982), often had a stormy existence, and as Wilson's own experience showed, widespread popularity could also be followed by widespread condemnation. A rich mythology was created around the figure of the genius, but the actual individuals remained misunderstood, and by no means always appreciated. This was not just a function of their own genius, but was also attributable to the nature of the myths about creativity that emerged with Romanticism. The genius was exceptional, but also a threat to society, in many ways, because radically different. A cult of the individual led to the idea of "genius without learning," meaning that the genius did not need to study, practice, or in any way go through the same effort that mere mortals did. Today, this can still be found in the show business adage, "don't let 'em see you sweat." In other words, don't let them see that you've worked hard for this, that it doesn't "just happen" effortlessly, and that what you're doing may still be very difficult, because that takes away from the magic. The Italian term for it, coined by Baldassare Castiglione in his *Book of the Courtier*, is 'sprezzatura' defined by Rebhorn as "an easy facility in accomplishing difficult actions which hides the conscious effort that went into them." (Rebhorn, 1978: 33).

It's indicative of the pervasiveness of this myth of genius without learning that in the early 21st century we're still eagerly buying books telling us that yes, hard work is needed for excellence! The somewhat spurious (Macnamara, Hambrick, & Oswald, 2014) 10,000 hours popularized by Malcolm Gladwell (Gladwell, 2009) are often cited as being a prerequisite for greatness.

Another creativity myth was the belief that genius could overcome any social obstacles such as poverty, lack of resources, and inferior parenting. Genius would be recognized and end up rewarded no matter what the environment, not least because someone would see or hear the genius, and pluck him out of obscurity. Hollywood thrived on this idea. And if you didn't "make it," it's just because you weren't quite good enough. This, of course, leads us right back to Eysenck's comment about genius and women. "For whatever reason." He was just being nice about it, really. Conveniently, most if not all geniuses were white men, of course.

YESTERDAY, TODAY, AND TOMORROW

I used to get mad at my school
The teachers that taught me weren't cool
You're holding me down
Filling me up with your rules

Getting Better, The Beatles.

Today creativity and innovation are central drivers of the economy, and "disruption" is big news. Education is struggling to keep up, and Sir Ken Robinson's TedTalk "Do Schools Kill Creativity" soars past 12 million views on YouTube. (Spoiler alert: Yes, they do.) Part of the problem, I would argue, is that the machine view and the creative "split" still lives inside most of us, and is certainly still informing our educational institutions, which now have found solace in Ritalin and other drugs when youngsters won't sit still and be a cog in the wheel of the well-oiled machine.

But today much more attention is paid to social, relational creativity – in groups, in R&D, in dyads, in cities…a whole new world is opening up to

show us forms of creativity that wasn't really recognized for what it was: we've all heard and seen the creativity of musical and groups, for example, but we attributed it to an individual, and really didn't know how to make sense of it. It's also increasingly clear creativity is not limited mostly to the arts and sciences. Many of the exemplars of creativity today are drawn from the world of business, and now Steve Jobs is a new archetype of the temperamental mad genius who can afford to treat others like dirt to achieve his vision. The new disciplines of "social innovation" and "design" are all about applying creativity to social change and a host of other social, economic, and political issues where creativity was formerly not on the top ten list of most desirable, let alone necessary, skills.

The Millennial generation interprets creativity differently than their baby boomer predecessors (Montuori, 2011). If for the former creativity means the great names of genius, for this generation, the exemplars are parents, friends, acquaintances, usually working with others to create some event or cool project, or making an interesting life decision. This is known in the trade as "everyday creativity," or more broadly "everyone, everyday, everywhere" creativity (Montuori & Donnelly, 2016), to suggest that creativity is no longer confined to a few remarkable individuals, that it can take shape in an everyday interactions, and doesn't have to involve "big bang" earth-shattering inventions and innovations or artistic masterpieces beyond compare, and can happen in anywhere – not just in the arts and sciences.

The notion of everyone, everyday, everywhere creativity is liberating in the sense that it suggests creativity is always already available, as it were. Our understanding of the complexity of creativity, of the many ways it can appear, is evolving. Over the last 500 years, the changes have in fact been rather dramatic. In the West we have seen from artisans with mostly unsigned works, labouring for the great glory of God, then individual geniuses representing the height of the new Humanism and then this new, 21st century development of a more networked, relational but perhaps prosaic creativity for everybody, everywhere.

One way of thinking of this change in generational terms is to compare Woodstock and Burning Man. For the Baby Boomers, Woodstock was the iconic expression of creativity. 400,000 people camped out in the mud to watch the greatest acts in rock and folk. Even if the audience was so huge it became an integral part of how we now remember the event, ultimately it was still the top-down model of a (relatively) passive audience enjoying a cavalcade of stars, from Ravi Shankar to Santana, the Grateful Dead, The Who, and Jimi Hendrix…

For Millennials, Burning Man offers a different experience. There are no big stars. Everybody is a "performer," and the participants engage in a mass expression of collaborative creativity, creating a "temporary autonomous zone" where everyone contributes to create camps, installations, and parties. The event exemplifies a much more distributed, relational, grass-roots creativity, where everyone is a star that is part of the Burning Man galaxy. (Many now feel that the original spirit of the event is being lost with the appearance of elite "camps" of billionaires who bring hot and cold running servants, and do not participate in the egalitarian, creative spirit of the event, merely viewing it as hip dress-up party.)

But there's something vaguely troubling about this new development. What does it mean that creativity can show up anywhere? If everyone is creative and everything can be creative, aren't we perhaps just losing or at least lowering our criteria for making judgments? Is creativity a free for all, all of a sudden? Is my finger-painting creative like Monet or Van Gogh? Is there a tremendous flattening that happens with this apparent democratization of what was once an elite quality? If we're moving into new forms of relational creativity, are we losing the brilliance of the stars that were shining so brightly at Woodstock – are we turning our backs on genius in favor of the inclusivity of mediocrity?

CREATIVITY AS A WAY OF BEING

At this point, it's necessary to step back again, reflect on some key terms and experiences. The new creativity does not have to drift towards collective mediocrity. It can be expanded, extended, and retain depth while being more inclusive. We begin with one clarification, from Abraham Maslow, so felt that creativity and self-actualization were almost the same thing. Maslow made a useful distinction between Special Talent (ST) and Self-Actualizing (SA) creativity (Maslow, 1959). ST creativity is most clearly exemplified in the musical prodigy, the child who can play piano beautifully at age 7, or the mathematical whiz-kid. There are people who have a special talent in one specific area, whether painting, singing, math, or chemistry. Many of the creative geniuses of historical record such as Picasso or Mozart were Special Talent creatives. SA creatives, however, are different. They do not necessarily have one overriding talent. Creativity for them is more distributed: it is a function of their whole life, rather than a talent in one particular area. Theirs is an attitude that sees the whole of life as an opportunity to be creative. Maslow used the term self-actualizing to refer to people who are psychologically healthy and integrated. He stressed

that in self-actualizing creatives, their creativity is directed not only towards creating specific products, but towards the actualization of the self. In other words, creativity is applied to their entire life, from their personal relationships to the workplace, from very mundane activities to the defining moments of one's life.

So here is one clarification. When speaking of creativity, the assumption has traditionally been that we're speaking about the arts and sciences. In the wake of Maslow, but also more specifically of the great creativity researcher Frank Barron, who tellingly titled two of his books *Creativity and Psychological Health* (Barron, 1990) and *Creativity and Personal Freedom* (Barron, 1968) respectively, creativity here refers more broadly to a way of being in the world, which may include, but is by no means limited to, excellence in the arts and sciences. Barron's research found that creative individuals have what he referred to as a cosmological motive, the desire to make meaning of the world and communicate that with others. He also found that creative people tend to see themselves as creative. This might be illustrated by the fact that it's unlikely one would hear a creative person say, "I need to be very creative now," in the same way one is unlikely to hear people in a creative organization – an improvisational musical group, for instance, or a research team – say "we need to be really creative." One would hear it from a person who does not think of themselves as creative, and an organization that does not usually promote creativity. The kind of person or organization where the status quo, the natural state of affairs is "a well-oiled machine," equilibrium and order. A creative person or members of a creative organization would say, they "need to produce something really good." Creativity is a given, not an exception. They don't occasionally "call" on creativity. They "are" creativity – if anything, the issue is channelling that creativity in a way that is good for the particular task.

Let's take a closer look at this cosmological motive and "being" creativity.

CREATURES, CREATION, CREATOR

Creativity is not a human invention or a human power isolated from the other powers of the universe… First came the universe's power of creativity (Fox, 2004: 39).

There is no such thing as a disconnected thing. Each thing emerged from the primeval fireball, and nothing can remove the primordial link this establishes with every other thing in the universe, no matter how distant. You and everything you do and become are further articulations of the primal fireball (Swimme, 1985 pp. 59-60).

Creatures, creation, creator: all these words bring us back to creativity. And they bring us back to creativity in a larger, more comprehensive way, albeit a way that needs to be re-articulated, perhaps. We refer to human beings as creatures who are part of creation. These words lead us, historically, to the vision of a Creator who creates these creatures and all of creation. But they can also lead us to a view that sees "creatures" such as human being as the result of an evolutionary process, rather than an all-powerful deity. An evolutionary process that sees creatures as embedded in, and emerging from, "creation," understood to be nature and more extensively the entire universe.

> The creation of the universe is usually envisaged as an abrupt event that took place in the remote past. It is a picture reinforced both by religion and by scientific evidence for a 'big bang'. What this simple idea conceals, however, is that the universe has never ceased to be creative. (Davies, 1989: 1)

What if we take seriously this idea that we are part of an ongoing creative process, one that began with the creation of the universe? What if the universe is a *creatio continua* (Burneko, 2005), and we, creatures that we are, are both created and creating in this ongoing creation? What if our very understanding of the universe, and of our condition in the universe, is itself a creation? What if our "cosmological motive," the way we make sense of the world and choose to live in the world is also, and perhaps our greatest, creation?

What if human beings are in fact part of a larger "Journey of the Universe," to use the title of my colleague Brian Swimme's documentary, a universe that is not a machine made of relatively isolated parts but "immensely creative and immensely interconnected"? This emerging view has been beautifully and poetically articulated by Brian Swimme in several books and documentaries, as well as by others, most recently biologist and complexity theorist Stuart Kauffman, but also physicists David Bohm and David Peat, theologians Beatrice Bruteau, Matthew Fox, and Gordon Kaufman, and earlier in the work of philosophers Alfred North Whitehead and Henri Bergson (Bohm, 2004; Bruteau, 1997; Fox, 2004; Kauffman, 2016; Kaufman, 2004; Peat, 2000; Peat & Bohm, 1987; B. Swimme, 1985, 1996; B. Swimme & Berry, 1994; B. T. Swimme & Tucker, 2011).

Where do we trace the origins, the journey of creation, of creative and interconnected human beings? And who and what are we connected with? Somewhere way beyond cities and places and even people, we can begin tracing ourselves all the way back to the historical and evolutionary processes that led our ancestors to travel in the most precarious of conditions, and end up all over the globe, from the heat of the Arabian desert or

the Sahara to the Arctic regions of Greenland, Canada, and Alaska. And before that, of course, to the Big Bang (?) and to the emergence of life on earth, to the fantastic journey of evolution, to the emergence of cells and the gradual development of a rich variety of life forms on Earth…

Our languages interweave in our travels and our stories of travel: the languages we create and speak also create who we are (Deutscher, 2010). The Italian philosophers Mauro Ceruti and Gianluca Bocchi (Bocchi & Ceruti, 2002) have explored our multiple origins, arguing that we live in a *Narrative Universe*, with interweaving stories and multiple narratives. We see that the many ways we have described our world and ourselves in turn shape us: we create knowledge that in turns creates us, our ways of thinking and acting and feeling.

The physicist Paul Davies outlined three scientific views, also created by human beings, in an effort to understand the universe. For three centuries, science has been dominated by the Newtonian and thermodynamic paradigms, which present the universe as either a sterile machine, or in a state of degeneration and decay. Now there is the paradigm of the creative universe, which recognizes the progressive, innovative character of physical processes. The new paradigm emphasizes the collective, cooperative, and organizational aspects of nature; its perspective is synthetic and holistic rather than analytic and reductionist (Davies, 1989: 2).

"Now there is the paradigm of the creative universe." In this view, creativity is also no longer an extraordinary phenomenon isolated in a few gifted individuals. It now takes a central role, arguably a *transpersonal* one, in the sense that it goes beyond any specific individual to connect with the very nature of our world. It is a view that, as Davies suggests, requires a "synthetic and holistic rather than analytic and reductionist" perspective. It requires us to think differently.

Today we might say that this new view requires the perspective of *complexity*, acknowledging the interdependence and interrelatedness and creativity of all phenomena, as well as the vital role of far-from-equilibrium systems. In other words, a perspective that goes beyond what we might call "machine thinking," a thinking that focused on simplification, viewed the universe as composed of isolated, orderly, static parts, and saw understanding as the result of taking complex systems apart. In the process, it lost precisely the connections, fluctuations, and disorder that are so intrinsic to creation. A new form of thinking is required, a kind of thinking that does not seek to eliminate complexity at the altar of simplification and reduction, but rather connects and contextualizes. A kind of thinking that is not just relational in space and time, but is also alive through its engagement with the unknown, the disorderly, the uncertain, the ambiguous (Morin, 2008). A kind of thinking that is dynamic, and knows how to go to the edge of chaos, where so much of what we think of as new and innovative happens. We need, therefore, a kind of thinking that can account for this new vision of the universe, of nature, and of humanity as profoundly creative and interconnected. A thinking that is much more aligned with the characteristics of creative thinking, the kind of thinking Edgar Morin has articulated so extensively and calls "complex thought" (Morin, 2008).

TAKING IT HOME

But what does this mean for us? These magnificent cosmic vistas, the transformations in the way we conceive of the universe, and the way we think about it are marvellously impressive and inspiring, but they can sometimes leave us rather at a loss about their implications for our everyday existence.

Let us step back and bring this to our own lived experience. We might begin by seeing the pervasiveness of creativity in very prosaic settings. At home, we look around and we might see chairs, paintings, lamps, a refrigerator, carpets, a waste paper basket. All human creations, as "everyday" and perhaps unimpressive as some of them may be. The clothes we wear are the result of extensive, usually global, processes such as people growing cotton, the transporting of cotton to a site where it will be turned into shirts, based on somebody's design, informed by larger aesthetic and economic decisions. Then the shirts are sent for distribution to outlets all over the world, to be bought by people who also make aesthetic and practical and economic decisions. The very shirt on our back is the result of a long series of creations and interconnections, involving a relation to nature (cotton, the pollution of factories, the machinery, the sustainability of the process) and to other human beings who produce the shirts (involving human creations such as tools, exploitation, organization, craft, production) and then sell them in the context of a culture with tastes, preferences, trends, and models. The shirts will be worn in workplaces, restaurants, on dates, at ceremonies, all further human creations. We are surrounded by human creativity. We are human creativity.

The coffee we drink, the food we eat, whether at home, in a café, or in a restaurant are all the result of human creativity, as well as the creativity of nature. The story of coffee reflects the creativity and interconnectedness of our world. The first coffee beans were found in Yemen, and exported to the rest of the world starting

in 1500. Coffee became a popular drink in Europe, with the first European coffee house opening in Rome in 1645. Vienna became famous for its coffee houses when Turkish soldiers left bags of beans behind after the siege of Vienna in 1683. The stimulating effects of coffee made coffee houses places of debate and philosophical exploration. Coffee is sometimes referred to as Java, where it was first cultivated 1699, brought there by the Dutch East India Company. The cultivation in South America, which now produces 45% of the world's coffee didn't get going until the middle of the 19th century, when vast tracts of rainforest were cleared to make way for coffee plantations. Today coffee consumption is, for many, a daily ritual. We have gone from Yemeni beans to Starbucks Soy Frappuccinos.

Whatever else it is, depending on everything from your appreciation of Starbucks Soy Frappuccinos to the emergence of global post-capitalism, we see in the journey of coffee an example of creativity and interconnectedness, and a reminder of the need to reflect on *what* we are creating, and *how*. Human beings have created a world where coffee has become readily available for all, in multiple permutations. But at what expense? How is the coffee grown? Who is employed in the various steps that lead to coffee appearing in our cup when we visit Starbucks, and how are they treated? My intention is not to criticize Starbucks, but rather to suggest that the lens of creativity and interconnectedness leads us to question more globally, in terms of a network of relationships in space and time, all having an impact on Nature and humans. Loy states, "The more I feel part of the world and genuinely connected with others, the less I will be inclined to take advantage of others, and consequently the more inclined they will be to trust and open up to me." (Loy, 2010: 57).

Creativity is not just found in the objects around us. The thoughts we think and the words we speak are in languages that are also human creations, and inevitably languages evolve over the years, with new words emerging and being added to dictionaries – from "truther" to "binge-watch" to "train wreck." We all live in cultures and sub-cultures with particular values, habits, traditions, beliefs, interests, and judgments, all of which were created through the interactions of human beings. We create cultures, but cultures also create us. Cultures shape identities, they shape how we see and act in the world, even when we don't believe they do because our individualistic culture tends to downplay the effect of culture (Montuori & Donnelly, 2016).

Creativity is found in human relationships, whether in the workplace, or in the intimacy of our homes and our most private exchanges. Every interaction between human beings is a process of creation. We become "stuck" in relationships when our responses become so habitual that we see no alternatives. "There he goes again." Or perhaps…"There I go again." We mostly do not feel that we are creating our relationship, but that we are seeing the world, the "annoying person," as he "really" is. In fact, any relationship is the result of a series of choices that occur in the creation of the interaction. When we say we have no choices, or more commonly, when we do not even recognize the possibility of choices and say things are "just the way they are," the annoying person is just annoying and there's only one way we can respond, we are in one sense lying to ourselves. Our own creativity is veiled, hidden to us, and available to us only in a very limited way, which ironically is to create, even if only for a moment, for a brief exchange, only one way of being in the world that does not recognize our creativity.

Creativity is found in institutions, in empires, in governments, in bureaucracies, in armies, in theatre troupes, in the Forest Service, among Boy Scouts and Girl Scouts. For the French philosopher Cornelius Castoriadis, if we want to determine the health of a society the key question to ask is to what extent a society can recognize its own self-creation in its institutions (Castoriadis, 1997). To what extent are we aware that we are creating these organizations, the systems, structures, processes that in turn shape our lives? To what extent can we re-cognize our own creativity in what we have created, and also recognize the possibility of things being otherwise, of other forms of creation? Or do our institutions seem to us to be heavy, unchanging, monolithic, perhaps bordering on the Kafkaesque? The crushing weight of the State in authoritarian countries, the citizen's inability to have any real agency, the oppressive control…

What becomes clear in looking at the world, society, and human beings as creative processes is the extent to which we have created societies, institutions, and relationships that have the implicit, and often explicit, purpose of drastically limiting our creativity. Viewing ourselves a part of a larger cosmic process of creativity – and seeing the whole world around us a creative process involves a process of re-cognition, an un-veiling of the creativity that is always there. It also invites us to ask, what are we doing with this creativity? What kinds of institutions, cultures, relationships, are we creating?

AUTHORITARIAN CONTROL AND CREATIVE EMERGENCE

Here we come to a key point about creativity, one that has not received anything like the attention it

deserves. Creativity and Authoritarianism exist on a spectrum of human possibilities. The comparative study of authoritarian individuals and of authoritarian institutions and societies shows that a key characteristic of authoritarian systems is that they inhibit creativity and promote conformity and submission (Montuori, 1989, 2005). Authoritarianism and the need to control arise through fear and anxiety: when human beings are threatened, we may all experience the desire to control our environment, to ensure safety and survival. But these responses have an age-old history of being manipulated by unscrupulous leaders who want to ensure conformity. Raising the fear level raises the possibility of an authoritarian response. It should be made clear that in this sense, authoritarianism primarily means conformity and submission to another. Authoritarian systems are marked by strong hierarchies. In these hierarchies, we are submissive to those above us, and dominate those below us.

In the past, the characteristics of creatives and authoritarians were often viewed in terms of fixed traits. A more useful way of seeing them is as ways of seeing and being in the world that we can all access, and that can be cultivated through practice, as well as being triggered or encouraged by our environment.

When we compare the characteristics of authoritarian systems and creative systems – whether individuals or organizations – we find that they are in fact opposites. Authoritarian systems are characterized by a focus on control, strong hierarchy, strong gender separation and submissive roles for women, as well as by stereotypy, which is the tendency to think in rigid, oversimplified categories, in unambiguous terms of black and white, particularly in the realm of psychological or social matters. Authoritarians portray the external environment as threatening, reject complexity in favor of simplicity, reject ambiguity, and are not introspective – they do not 'look within': authoritarian individuals project their repressed feelings and shadow material onto the world, and in authoritarian social systems we find the creation of an enemy that is often a combination of collective shadow issues. The external enemy is used as a way to unify the system, whether the personality or group or country, and needs to exist in order to keep the system from falling apart, giving it an obsessive purpose.

Creative individuals, and creative social systems, cultivate independence of judgment, openness to experience, and a tolerance for ambiguity. Pluralism and uncertainty contribute to the allurement of complexity, and the challenge is to integrate complexity in an elegant, inclusive higher order. Creative individuals do not conform to pre-existing societal gender roles, and creative societies respect and value both men and women. Creative individuals have a "cosmological motive," a desire to create their own understanding of the world and of existence and share it with others. As Frank Barron wrote, "Life is an opportunity for creating ourselves anew as we go along. We are all poets and can say with Yeats "*it is myself that I remake*" (Barron, 1995: 213).

Jean-Paul Sartre, the existentialist philosopher, used the term "bad faith" to refer to the way human beings adopt certain societal values and as a result give up their freedom, believing (in a process of self-deception) that there is only one way to act or think (Sartre, 1994). Here we continue to see the connection between freedom and creativity. For existentialists like Sartre, human beings are always free to make choices, even in the worst of circumstances. Human beings adopt social personae, take on roles, and can become those roles. In the process of inhabiting a role a little too well, we lose ourselves in the social fiction, and we limit our freedom. From our perspective, we might say that we human beings create our own escape from freedom. We create the person who is trapped in a role, as the waiter, the mother, the father, the executive, the bus-driver, the carpenter, the nurse, the cook, the accountant, the farmer. We veil our freedom from ourselves, and do not take responsibility for our creativity. As a result of giving away our creativity, our ability to create, we give away our freedom, and we invite authoritarianism in ourselves, and in others.

One place where the distinction between authoritarian control and creative emergence is highlighted is intimate relations. Do we want to control our partners, make sure that they obey, do what we want them to? Is our "love" for them a function of our power over them?

Or do we want them to be (and become) who they are, allow for their creative emergence, with all the unpredictability that his may entail? Does our love form the basis for our collective capacity to create?

We can see that authoritarian "control societies," as the sociologist Phil Slater called them (Slater, 2008), want to put us in a box. We have also seen that we have a tendency to put ourselves in boxes, as Sartre showed. Creative individuals and societies allow for creative emergence. But we see also the relationship between creativity and freedom – creating our lives together, rather than the controlling others, or wanting to be controlled by others, where freedom is curtailed, the range of choices reduced, and our existence boxed-in. Creativity is the response and alternative to authoritarianism, to control societies to our own need to control and be controlled.

CREATIVITY AND INTERCONNECTEDNESS

If we see our world as creative interconnectedness, we can never forget that all creation is collaboration, that all creation is co-creation. We always create in a context, in a web of relationships that extend from the world around us, nature, human relationships, to the thoughts, ideas, beliefs, traditions, and worldviews that shape the way we think. We might argue that we are always co-creating, but the Machine Age view did not share this view. Consequently, we did not think of Nature as co-creating with us, and this distorted relationship led to what we now know as the environmental crisis.

As we begin to explore this remarkable notion of a creative universe, a cosmic creativity, but also see the deep creativity embedded in the most prosaic actions and objects of our daily lives, we are opening ourselves up to a world of creatio continua, of continuous creation, not just in our observation and inquiry into the world around us, but also in how we ourselves create our perception and understanding of the world. The very act of seeing, our sense of what the world around us is all about, is a creation that is shaped by our physiological apparatus – the miracle of the human eye—and our psychological and cultural background. The more we explore this interconnected creative universe, the more follow the trails of interdependence and the journeys of creation, the more we learn about our world and the more we can assess and take responsibility for our creations. At the same time, we also begin to recognize our profound ignorance of so many aspects of our existence, of the foolishness of attempting to dominate and control, and of the wisdom and compassion needed to recognize our own tendencies to get drawn into the vicious circle of control by fears, anxieties, and disappointments.

Seeing this world of creative connection can also be an invitation to explore the many ways in which our relationships, from the most intimate to the most prosaic, every day, work relationships can be an opportunity to connect and create. Are we seeking to control others, to box them in, to have them conform to the picture we have decided we want to see, or are we allowing them to speak, to be who they are, are we open to experience them? Do we know how to listen in a way that allows their creativity and ours to flourish? Are we seeing and hearing them, are we making a space for them to emerge along with us? Do we know how to look, to listen, to encourage, to play, to engage with others in a way that allows our creativities to connect, so that we may create together? Do we know how to engage with creation, and let creation engage with us?

If we ever doubt we are able to answer these questions, we can draw inspiration from these two remarks. The first is from Martin Luther King (King, 1958): Our true nature is creativity (Fox, 2004: 28); Whether we call it an unconscious process, an impersonal Brahman, or a Personal Being of matchless power and infinite love, there is a creative force in this universe that works to bring the disconnected aspects of reality into a harmonious whole (Fox, 2004: 58).

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GEOFF FITCH

TRUTHFULNESS AND COLLECTIVE ENLIGHTENMENT

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THIS ARTICLE EXAMINES THE ESSENTIAL PRACTICE of truthfulness and its role in supporting collective enlightenment, drawing on over 12 years of experience exploring, facilitating, and researching transformative change in integral development programs. Truthfulness is distinguished as a rich injunction, which extends beyond authenticity in relationship to individual and collective life grounded in a humble commitment to the truth. Truth in this context is a complex distinction that includes objective, subjective, and inter-subjective integrity, and is developmentally grounded. A commitment to the truth plays an essential role in collective enlightenment. As an inquiry, it places us in a continuous confrontation with the illusions and distortions that distract us from enlightened perspective. Inter-personally, it challenges us to drop our barriers with each other, which fosters compassion, understanding and collaboration. Socially, it prompts us to be responsible for the world we have created and to engage in right action, which is always an expression of the truth. Systemically, it opens the flow of energy and information, which allows systems to function effectively and to evolve. Being, and consequently, evolution, exists in the truth, or reality itself. While it is quite simply impossible to become enlightened, by any reasonable definition of that word, in a state of self-deception, inauthenticity or denial, it is also the case that morally we must face our reality squarely in order to relieve the enormous suffering inherent in our existence. We examine the implication of this understanding for practice.

BACKGROUND

For over ten years, Pacific Integral has been exploring, facilitating, and researching transformative change in an integral, developmental context, through the Generating Transformative Change (GTC) program, its own organization, and other communities of practice it has convened and participated in. While the GTC's structure has evolved over its history, it is currently a 9-month, intensive leadership and personal development program. In this time period, we have facilitated and engaged with dozens of different integral collective learning experiences, involving hundreds of individuals and over durations ranging from months to several years. The core of this exploration has been the GTC program, which enacts and facilitates a new way of being and relating, which we refer to as causal leadership. We refer to our collectives, as causal leadership collectives[1].

A foundational orientation to this work is a developmental understanding that spans the concrete, subtle, metaware, and non-dual worlds through which our conceptions of ourselves, each other and our world emerge and evolve[2]. The term, 'concrete', refers to the world of the senses, of ordinary perceivable matter, of individuals and groups in their concrete appearances. The 'subtle' is the world of mind, with its conceptions, emotions, constructions and contextualization, the world of imagination and subtle contexts and systems. The 'metaware' is the domain of awareness itself, of the unconditioned mind, full and empty, the witness and the manifest phenomena of all concrete, subtle

and causal realities. The 'non-dual' world is that which is beyond, includes, and unifies all distinctions, the world beyond mind that also births mind and all forms.

As one's understanding of reality evolves through these territories, the depth of our awareness and perspective taking shape what we mean and experience as I and We. The specific contours of the movement from subtle, intimately personal collectives, to causally grounded spaces in which the concrete and subtle I and We are fully present and interpenetrating with each other and our awareness of the ground of being, represents the leading edge of most of the communities Pacific Integral convenes. In these spaces, the 'I' is not backgrounded but rather personal unique expressions are highly valued in an unattached, non-demanding way, as are collective expressions. The experience is of one arising phenomenon in the paradoxical coincidence of seemingly individual and collective consciousness. What we think of as collective intelligence is heightened, but so is individual intelligence. While this developmental understanding is mentioned at the outset, as it informs the language we use to describe collective enlightenment, it is not meant to essentially prioritize this perspective above others such, such as the dimensions of shadow, embodiment, interpersonal authenticity, or service. Collective enlightenment in this context is this a complexly understood occasion, where 'collective' ultimately refers to the whole that includes both I and We perspectives, and 'enlightenment' includes awakening of consciousness towards a realization of our ultimate non-dual nature, as well as a rich understanding of human development and ethical action in the world.

TRUTHFULNESS AND COLLECTIVE ENLIGHTENMENT

While our exploration of human development has taken an integrative approach, it is useful to consider the through line of *truthfulness*, an essential principle and practice for both individual and collective evolution, integrity, and a just social existence.

"You will know the truth, and the truth shall set you free[3]." This simple idea is both profoundly embedded in the human experience and simultaneously quite astonishing, that by simply knowing the truth, we are set free. Yet this is an essential human experience: in the moment of realization of how things are, of acceptance of what one has been avoiding, the struggle to fight reality or the illusion one has been living under is ended and one is immediately liberated. Paradoxically, to dispel our illusions of knowledge is also liberating. In this, the life of Socrates is our consummate example. In his demonstrating wisdom by simply knowing that what he did not know, he was pointing out the folly of hubris in our knowing[4]. The deeper truth here is to know the limits of what we know. Both of these perspectives illustrate how deeply our journey towards enlightenment is seated in a commitment to the truth.

The 'truth' here refers to that which is in accordance with reality, or how things are. Yet this just punts the question, what do we mean by reality? For this we begin with an understanding of three essential perspectives: the objective, subjective, and inter-subjective, identified by Wilber's Quadrant model[5]. First, the 3rd person 'objective' view of reality refers to our discernment of the world as an object whose nature we can discern. The sun is up and the birds are singing. Through observation we can determine if this is true. Next, the 1st person perspective of 'subjective' view of reality refers to our discernment of our inner nature as a living subject in the world. This is my and your 'personal truth' – our thoughts, emotions, beliefs, states, identities and worldviews that form the nature of my personal reality. This is where things stand for me, personally, and where I stand with things. I love my children. I sense the preciousness of human existence deeply. I feel anxious. These are personal truths. Finally, the 2nd person 'inter-subjective' view of reality refers to our ability to discern our shared sense of how things are, our agreements, morals, and values which are true for us. It is important to note that often the domain of truth is limited to the objective view of reality. This is reflected in Habermas' domains of validity claims[6] that includes these three perspectives but posited the truth as a claim to the objective. (The validity claim to the subjective is sincerity and to the inter-subjective is normative rightness.) While we acknowledge the difference between these domains, for practical purposes we refer to them all as different kinds of orientations towards truthfulness. There is a reason we ask (when referring to subjective reality), "what is true for you?" rather than "what is sincere for you?" An acknowledgement of these domains as a kind of truth calls us to submit to them more deeply. It offers a kind of respect for their power. It also sets the stage for an integrative perspective that transcends and includes all three.

Likewise, our understanding of what is true evolves as the complexity of our awareness evolves through stages[7] of subtlety and complexity. Our objective view of reality evolves as our complexity of consciousness evolves. As our consciousness becomes more complex and subtle, so too does our understanding of

the world, ourselves and our collective life evolve. Truth is in an important sense contextual and evolving, but also reveals itself in greater depths. For example, many feel that we face a kind of planetary ecological catastrophe that is an existential threat to our collective existence. This is a direct result of the facts as they stand in the planetary ecosystem, but also arises as human awareness and technology make it possible to conceive of something as complex as a planetary ecosystem. This evolution in consciousness is also present in Jesus's words quoted earlier. When he said, "the truth shall set you free," those to whom he was speaking were confused. They were not slaves – how could they be set free? Jesus responded, "everyone who sins is a slave to sin[8]." He was referring to a subtler, inner liberation, which transcended the understanding of slavery as a concrete reality.

This all may seem obvious, but it is worth engaging clearly, as human experience is fraught with deception. Current neuroscience research points to the remarkable extent to which we are driven by unconscious forces. Social science research shows that people on average lie at least once per day. Human beings have evolved a strong capacity to deceive others while going undetected and to detect deception in others. Freud distinguished the unconscious defence mechanisms that constitute our ability to some degree to dissociate from reality. Undoubtedly this is an adaptation that has helped us survive, but a reaching for greater consciousness and truth has equally marked our evolution.

Enlightenment can understand as the realization of the ultimate truth of our existence. Likewise, a commitment to the truth is also foundational for moral action. As Socrates also said, "no man knowingly does evil[9]." What he is suggesting here is the truth that our moral consciousness is often shaped by our ignorance. In order to do evil, some level of alienation from the truth is required. Facing deeply how things truly are, it becomes harder to act in ways that do harm.

There is an adage, "pain is inevitable, suffering is optional." Victor Frankl, for example, demonstrated how, in the most extraordinarily dire circumstances, we are still free to choose how to respond to those circumstances[10]. While we may not be able to avoid pain, an essential response to our circumstances that avoids suffering is to face them and acknowledge the truth of them. Suffering is inherent in an avoidance of the truth. It feels bad to avoid reality and pretend things are otherwise. This is one reason to say, "the truth shall set you free" – because we actually experience that freedom in the surrender to what is so. We can conclude from this, perhaps, that we are a kind of barometer for the truth, that we know it when we see it and when we meet it in others. We experience the relief of the letting go of the pretending, denial, prevarication, interpretation, and all forms of wrangling involved in its avoidance. This points to an important result of living truthfully. It reduces suffering.

Inter-personally, truthfulness challenges us to drop our barriers with each other, which fosters compassion, understanding and collaboration. While admittedly, there are occasions where the deeper truth is to not be fully honest, most human relations call for a greater degree of openness and transparency than we currently allow ourselves. Truthfulness in relationship is a challenge to us to be authentic and honest with each other. As we bear our truths to each other, we come to know each other more deeply. We experience greater trust, connection and empathy with each other. These experiences can be the foundation for a more loving and nourishing existence, and for greater collective intelligence and enlightened action in the world.

As an inquiry, a commitment to the truth challenges us to confront our own illusions and distortions that distract us from an enlightened perspective. The spiritual teacher Byron Katie has made a practice of this, by inviting us to ask about our difficult circumstances, "Is it really true[11]?" While this injunction can be a powerful cure for accessing the presence beneath the contradictory conclusions about our life that cause us suffering, it works all the way up and all the way down to come into a greater congruence with and embrace of what is. Almaas describes the enlightened perspective called Holy Truth as seeing reality as having "no divisions in it. It exists, it is now, and it is nondual[12]." Faced with a sense of division, we can ask, "is it really true?" If, having lived with that question until that the ultimate truth reveals itself, we find a reality with no division, then living truthfully calls us to be faithful to that truth, embody it, live it, speak it, and act from it.

Socially, the practice of truthfulness prompts us to be responsible for the world we have created and to engage in right action, which is always an expression of the truth in the world and ourselves. We are, in our present political climate, seemingly waking up from a habitual acceptance of lying in the public sphere. The acceptance of media manipulation, partisan posturing, political correctness, and "alternative facts" seems to have reached a level at which the public is animating a new-found faith in the truth and insistence on honesty and authenticity. This is a measure of our own collective evolution. Theory U[13] posits that the deeper the ability of a social system to encounter

the world and itself, to 'observe' what is so (in our experience at concrete, subtle, and even metaware levels[14]), the deeper the process of sourcing a new future can be, the more transformative the change. Systemically, this awareness opens the flow of energy and information, which allows systems to evolve. If we look at our collective transformation from a systemic perspective, we can see that systems, based on communication, function on the flow of information. From a systemic perspective, we can see that a practice of truthfulness enables information to flow. It allows collective intelligence to emerge as awareness becomes present to what is so in the system.

FOUNDATIONAL PRINCIPLES FOR PRACTICE

To examine the implications for development, let us consider some foundational principles for practice. The first is the understanding that to engage with a commitment to truthfulness is to challenge ourselves to shed our hubris and live life with humility. This seems counter-intuitive because so when human beings speak of the truth, it sometimes accompanied by a degree of righteousness and posturing. The so-called 'truth' has often been used as a tool for dominance. But let's not confuse using force with living truthfully. The use of force is rarely indicated by the truth and we naturally sense the truth's absence in the face of hubris, even when it dresses itself up in the language of truth.

When we acknowledge the truth, we are ultimately acknowledging what is, and this is profoundly humbling. The acknowledgement has us come face to face with our own egoic will to have reality be something other than it is and challenges us to let that go and submit to something larger than ourselves. The nature of the truth is reality and in an important way, this is not of our making. What we are and what we are faced with is given to us. One is born in this time in history, with this karma, with this enlightenment – all of it. To recognize this as truth, is in an important sense to recognize we are powerless in the face of what is so. This is not to say we are completely powerless because, paradoxically, our power and gifts are also part of the truth that is given. We are simply powerless to deny what we know, to pretend what we don't know, to avoid our responsibility or to take on others, to hide who we are meant to be.

To engage in practice, it might be helpful to imagine the truth as a kind of limit. To live truthfully is to approach and meet this limit, not recede shy of it, nor to extend beyond it. As we live truthfully in knowledge, for example, we are neither denying what we know, nor pretending to know more than we know. If we imagine this limit as a circle inside of which is what we know and outside of which is what we don't know, the inquiry is, what is truly inside that circle? Discovering that, are we openly acknowledging to ourselves and to others through our words and actions what is truly so? Are we not pretending to know more? This was the essence of Socrates' inquiry and it led him to believe that circle was quite small! We might say too that while we can know the truth, we can't truly know that we know it, given that human knowledge is so prone to error, misunderstanding, and revision. We approach the limit humbly with awareness to hold our conclusions lightly, but not too lightly.

Likewise, in the domain of action, we can see truth as a kind of limit. Human beings, who live as social creatures, dependent on a larger reality for their existence, have responsibilities. We are inter-dependent with our world and this existence gives us each individually and collectively things to handle and to be responsible for. To live in the truth of what life gives us, is to live responsibly and diligently. It is not merely to acknowledge the truth of something that is owed, for example, but to strive to pay the debt. This truth, however, is also kind of limit. Returning to our circle, we can say there are some things in side that circle that are truly ours to handle no matter how much we may want to avoid them. What's outside of that circle is not, no matter how much we may want to be responsible for them. Anyone who is a parent has recognized the difficulty of letting our children be responsible for what is really theirs to handle. Truthfulness in action is doing what is ours to handle and no more. This is true whether or not that circle is personal, collective, or societal.

Beyond knowledge and action, let us consider something deeper and more implicit: being and identity. Each person is unique, given to a time and place, and at a more essential level, a sense of identity and purpose. As Heidegger suggested, we have a "thrown-ness" into our existence in that our being in the world is given to us. This speaks to the given nature of our sense of truth, but also to our identity and potential. The animating sense of purpose we have, our spiritual longing, our artistic impulses, or any other higher movement towards life and expression that we have can be seen as innate to our identity. You, I, and us in a sense are, and are meant to be – something. Whether individual or collective, this limit of truth as identity can be seen as a sense of purpose or self-as-potential, or as an identity, a sense of who we are. If you have always felt you should be an artist,

or wanted to be an artist, if your life is somehow incomplete without art as long as you avoid it, you are, in a very practical sense, meant to paint. To live truthfully, is to be as you are in the world, means to fully express your art, to not hide, or withhold all the colours and shapes inside of you from the canvas. Likewise, a very deep part of the American identity has been the notion of a 'city on a hill' or a beacon for the world, words first uttered by Massachusetts Bay Colony Governor John Winthrop and which animate the soul of the country today. The limit of identity is to express it completely, not more or less. When America is not being a beacon, when it shies from it or arrogantly exaggerates it with force, it is in a real sense un-American.

The truth is, paradoxically, in important ways, both fixed and fluid. In order for us to make a claim of truth, we acknowledge that there is such a thing as the real. We take a stand against a merely solipsistic view and state there is a truth outside of me and therefore it has a nature that can be named. This is true equally of subjective realities, as in naming them, we are to an extent making them object. Yet, if we examine these truths we must admit that in important ways they are contextual, impermanent, incomplete, and subject to revision. In practicing truthfulness this is a delicate balance. It is easy to bypass the truth of things by declaring its fluidity and contextuality, and contrariwise to be dogmatic in its fixed nature. To live truthfully, we hold a balance, standing in and living what is true, while avoiding idealizing it or reifying it over time.

An important way that truth's fluidity reveals itself is the way in which it has depth, as expressed by our developmental understanding of awareness. As stated earlier, as awareness moves towards greater subtly and complexity, through concrete, subtle, metaware, and non-dual territories[15], we experience deeper realities that transcend and include prior understandings[16]. While in one moment we may be convinced of our separateness as a concrete self, in another we may see our subtle inter-connectedness. In some sense we may recognize these realities as both true, but one is truer, in the sense that it is deeper. It is said that a student of Ram Dass raised his hand and asked: "You say we should follow the inner voice, but I find so many voices in there, how do I know which one is the right one?" Ram Dass replied, "Listen for the more inner one[17]." Not only is our knowledge provisional in the sense that something might change or come to light or we might discover an incorrect assumption or belief we have been holding, but more significantly, as our consciousness grows, a whole new world might reveal itself.

This suggests the final point of practice to discuss, which is that living truthfully is a process of dialog. In practicing dialog, we surrender to what is beyond ourselves, what is given and in that engage to be receptive, to explore, to learn together and ultimately to evolve through the dialectic that draws us to greater depths. In dialog, we are in relationship to self, other, to life and evolution itself. The relationship to the self is one of authenticity. As Socrates said he always consulted his inner daemon, which told him what not to do – it revealed the truth to him. In dialog, the act of self-relationship is to practice the discernment of one's own reality and to express it. The relationship to others is to engage in vulnerably mutual reciprocity, conversation, and collaboration with others in a commitment to the truth. Through this we bring our self into the light of day, challenge our beliefs and call ourselves into expression. We also come into greater relationship to the truth of our relationship, the truth between us and of the world. The relationship to live is to be in an ongoing conversation with the events of the world and of our life, to see our life as a kind of curriculum that is given to us that we can face and meet squarely. Finally, we are in a dialog with depth itself, as if to ask, given what we know today, what is the more inner truth?

DEVELOPING CAPACITIES FOR TRUTHFULNESS

As we have discussed, these are some essential elements of practicing truthfulness: inquiry, dialog, and somatic and intuitive discernment to discover the truth; authenticity and intimacy; right speech and action; accountability; and showing up fully in expression of one's identity and purpose. In our work these practices support and are supported by an integral approach to individual and collective development, as they support and are reliant on greater capacity in consciousness. Minding these principles of living truthfully, we engage practices that develop these capacities.

The first and most important practice to mention is to develop state capacities in the individual and group that allow them to access, sustain and eventually be responsible for their causal awareness. Initially this may be as simple as learning breathing and awareness practices that allow individuals and groups to let go of energetic and physical holding and to rest in the stillness of awareness itself. Discernment often requires us to slow down and become still. As mindful awareness deepens, our capacity to be present to all experience grows, building the resilience and awareness necessary to stay present to what is.

Likewise, it is important to learn to attend to the concrete and subtle dimensions of ourselves. The work of integration, healing, and horizontal growth is a regular focus of our work with individuals and collectives. Shadow work and practices that support intimacy and embodiment are central tools of these groups. Our causal leadership collectives learn about and practice shadow work together, including understanding the dynamics of group shadow – scapegoating and marginalization, e.g. – as well as collective horizontal and vertical autopoiesis. They also practice emotional awareness and intimacy and embodied practices through play, dance, creative expression and improvisation. The inclusion of these approaches serves to expand the realization of the individual's and collective's potential, to serve greater fluidity, agility and impact of their work together, but also serves to break down the inner and outer barriers to acknowledging the truth. As further elaborated below, they are also held in balance with the actual living of life and work together and individually, not merely as an end in themselves but as an integral dimension of the life of the group and its service and being in the world.

Causal collectives are supported by a developmental culture, including inquiry, radical openness to change, and an awareness of these individual and collective patterns – a transformative posture that recognizes the individual and collective as interpenetrating. In practice, this may mean as an individual, I intend to be in a place of inquiry – asking how am I seeing the moment/situation? What perspective am I looking through? What is unseen, or unconscious in me that is shaping my experience? How am I seeing the 'We' and the other such that my seeing forms who we, and they, are? Likewise, as a collective, what patterns of perception and action are shaping and limiting who we are? Can we be aware of our unseen assumptions and agreements as to who we each are, and hold those lightly, open to revision, experimentation and exploration? This collective inquiry must be founded on interpersonal inquiry, where we develop the trust and skill to vulnerably give and receive feedback, explore authentic experience we have of each other, as well as the stories we tell ourselves about each other. This practice of self- and mutual-inquiry, letting go, and letting come of the emergent self/collective is essential to the practice of these communities.

Finally, these collectives aim to bring the world into the collective and the collective into the world, which fosters greater global awareness as well as a context for the expression of our identities in the world. They do this by including in their scope all of the fields of connection and practice the participants are involved with, and by including an orientation to service and action. This radical inclusion of the macro and micro, individual and collective, as well as the personal and universal, arises out of a deeper global intent that springs from the later stages of awareness–that we are expressing care for the whole as we express care for the individual. In facilitation, we endeavour to both broaden our moral span of care and assist participants to learn to listen more deeply to the meaning and purpose of their lives, while stretching ourselves to engage more fully in that purpose in the world. In practice, these collectives engage in work together and mutually support each other's individual expressions in the world. They hold space for each other's deepest heart intention for the world, and out of that, a radical and audacious space of potential for each other's lives and for the life of humanity.

These practices are some of the learning we have discovered in our engagement with our developmental process in our what we call Causal Leadership collectives. We recognize that the deep, transformative spaces in which Causal Leadership is grounded are a reflection of the natural movement of consciousness to fuller expression. In addition, as we deliberately bring 'leadership' into the work through an integration of consciousness and action in the world, these collectives move beyond an exploration of development itself, to enacting the awakened awareness of I/We as expression in the world. This occurs in context, in life, limits, time constraints and diverse environments that are realistic and embodied. It is an intention of this work that we not just experience or train ourselves, but that the intelligence of the space find its way into the world, beyond the rarefied containers we can create. This integration requires a depth of working at multiple levels: leadership, organization, intimacy, shadow, relationship, awareness, energetics, and so on, while engaging the unity of distinct practice spaces, the ordinariness of life, and conscious creation, Divine Being itself. In this sense, the potential for we-space work that we hold is to create conditions for new 'leadership', collective action, and the transformation of human society.

Yet, where are we in all of this, without the truth? This truth is here, now, and it is simple. It so often is so purely simple it is spoken in the words of a child: "I love you." "I don't know what to do." "I want to paint." "I don't know what created me," "I am everything." The simplicity at the core of this work is a humble commitment to living truthfully. With

that, we can all be with what is, including our impulse and vision for a greater world. We can hold it all lightly but also wholeheartedly and live as fully and brightly as we are meant to.

♦

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⊙ ♦ ⊙

Feelings are just visitors, let them come and go.

Mooji

Nothing really goes away until it has tought us what we need to know.

Pema Chödrön

Just as a snake shades its skin,
we must shed our past over and over.

Siddhartha Gauthama

⊙ ♦ ⊙

CHARLES JOHNSTON

BRINGING WISDOM TO THE FUTURE

CREATIVE SYSTEMS THEORY'S CONCEPT OF "CULTURAL MATURITY"

Charles Johnston MD is a psychiatrist, writer, and futurist. He is best known as the originator of Creative Systems Theory, a comprehensive framework for understanding purpose, change, and interrelationship in human systems. He has written numerous books and articles on the future and what it asks of us. His most current writing can be found at www.culturalmaturityblog.net. Podcasts that address essential challenges of our time can be found at www.lookingtothefuture.net.

A MAJOR PORTION OF MY LIFE'S WORK HAS FOCUSED on making sense of the important challenges ahead for us as a species. Key in this work has been the recognition that effectively addressing many of those challenges will require new human capacities. As important has been the recognition that the potential for those new capacities is developmentally built into who we are. I introduced the concept of Cultural Maturity with my 1984 book *The Creative Imperative*. The concept describes a needed, and newly possible, "growing up" in how we understand and act.

"Collective Enlightenment" is not a term I would tend to use. But Cultural Maturity is very much about a sophistication of human thought and action that has not before been needed – or possible. And it is very specifically not just about becoming smarter, but also about learning to be wiser.

Cultural Maturity is a formal notion within Creative Systems Theory's framework for understanding the workings of human systems developed by colleagues and myself over the last forty years[1]. The theory provides an encompassing way of thinking about human change processes of all sorts – from individual human development, to the growth of relationships, to the chapters in history's evolutionary narrative. One of its main contributions is the perspective it brings for making sense of our times and what the future will require of us.

The concept of Cultural Maturity describes a newly possible – and increasingly necessary – "growing up" as a species. The concept requires that we think more long-term than is our custom. We saw first inklings of Cultural Maturity's changes over a hundred years ago. And culturally mature advances should continue to define the cutting edge of understanding and social innovation for centuries ahead. It also requires that we be comfortable with the often confusing way in which change in human systems works. Cultural Maturity's changes are necessarily of a two-step-forward-one-step back sort – and sometimes three or four steps back. But they could not be more important. I will argue that our future well-being as a species depends on them.

My work over the years has approached the concept of Cultural Maturity and its implications from multiple directions. I've clarified Cultural Maturity's essential role in addressing critical questions ahead in all parts of our lives – from the challenges of effective governance to what love in the future will require of us. With the Institute for Creative Development – a Seattle-based think tank and centre for advance leadership training – I've worked to teach about and foster culturally mature leadership. And I've written my two most recent book's specifically to make the concept more broadly understood. (*Hope and the Future*[2] is a short, general audience work. *Cultural Maturity: A Guidebook for the Future*[3] is a lengthy effort written for people committed to developing culturally mature leadership capacities).

This short piece provides a glimpse of this broader effort. I'll touch briefly on the developmental thinking on which the concept is based. I'll observe some of the critical emerging challenges that culturally mature capacities help us address. I'll address the cognitive changes that make culturally mature understanding possible and tie them to needed new capacities. I'll outline the evidence for Cultural Maturity, including one particularly provocative piece of evidence that makes Cultural Maturity arguably the only option going forward. And I will very briefly compare and contrast the concept with other ways of thinking about the future.

Cultural Maturity is not as easy a notion as the simple phrase "growing up" might suggest. But understood deeply, it provides essential guidance. And while it requires that we think in new ways, where it takes us is ultimately straightforward. Cultural Maturity is about a predicted next chapter in our human development and the ability to address questions of all sorts in more direct and nuanced ways. Think of it as a needed "new common sense."

THE BASIC NOTION

Cultural Maturity is much more than just a helpful metaphor. It involves changes not just in what we believe, but in an important sense, changes in who we are. We can think of it in terms of two parallel developmental processes. It helps to take them one at a time.

The first process gives the concept its name. Cultural Maturity brings a new, more mature relationship between culture and the individual. Human culture in times past has functioned like a parent in the lives of individuals. It has provided us with our rules to live by – shared absolutes – and, in the process, a sense of identity and connectedness with others. Unquestioned cultural rules have also protected us from life's very real uncertainties and immense complexities.

This traditional relationship is changing. Cultural absolutes today serve us less and less well. They limit flexibility in our personal lives. And they often put us at risk when dealing with peoples whose beliefs differ from our own. They are also having diminishing influence.

This loss of past parental guideposts has Janus-faced implications. It reveals possibilities that before now we could not have considered. But at the same time, it can bring a disturbing sense of absence. Combined with how our world has become more risk-filled and complicated, a weakening of familiar rules can leave people dangerously overwhelmed and disoriented.

The key to what we see being anything to celebrate lies with the second kind of process. Cultural Maturity is not just about acting in more grown up ways. It is a product of developmentally predicted cognitive changes. It turns out that the same change mechanisms that generate today's loss of past absolutes also create the potential for new, more mature ways of thinking and being in the world.

This further recognition is critical. If all that we are seeing today is a loss of past guideposts, we have a problem. New possibility would be only of the postmodern, "anything-goes" sort. What might seem to be freedom would produce instead only a loss of order and a dangerous kind of aimlessness.

We aren't used to thinking of social/cultural change in cognitive terms. That I might, I'm sure comes in part from the fact that I am a psychiatrist as well as a futurist. In work with individuals, I'm used to thinking about change not just in terms of behaviour, but in relationship to psychological development. I am also used to thinking about critical points in psychological development in terms of underlying cognitive changes. It was not a major leap for me to start thinking about large scale societal changes in developmental/cognitive terms.

Creative Systems Theory describes history – from our tribal beginnings to modern times – in terms of historical chapters, with each chapter ushered in by a developmentally-predicted cognitive reordering. The theory proposes that we can understand the changes that define our time in this same way. Creative Systems Theory uses an ungainly (but precise) term for Cultural Maturity's specific cognitive changes and the new vantage for understanding that they make possible: Integrative Meta-perspective. Even just a beginning sense of it provides important insight.

Integrative Meta-perspective involves a couple, almost opposite dynamics. We see each of them, simply at different scales of significance, with both personal maturity and Cultural Maturity. The first produces greater awareness, a more complete kind of stepping back from our complex natures. The second produces a new depth of engagement. With it, we get not just further abstraction, but the deeply embodied kind of understanding that is needed for mature – wise – decision-making. Each kind of dynamic is new, the first certainly in its implications, the second more fundamentally.

Later in this article I will describe Integrative Meta-Perspective in more detail. I'll contrast it with the kind of cognitive organization that produced modern age thought and our previous chapter in culture's story. I'll also tie where it takes us to the new capacities needed to address today's new challenges. For now, it is enough to note an observation that helps define its relationship to the topic of this journal issue.

The changes that produce culturally mature perspective have particular significance – and not just because of their pertinence for today. Creative Systems Theory delineates how thinking with each previous chapter in culture's evolution has been organized around particular, limited aspects of cognition's complexity. In contrast, Integrative Meta-perspective engages and draws on the whole of this complexity. It involves both more fully stepping back from that complexity and more deeply engaging it. In doing so, Integrative Meta-perspective makes it possible to understand in

ways that are fundamentally more encompassing than in times past. We could say more systemic, more complete, or simply wiser.

The concept of Cultural Maturity assists us in four ways that will be essential going forward: First, it helps us put the challenges and changes we face today in larger perspective. Second, it provides a new guiding narrative as the cultural stories we've traditionally relied upon cease to serve us. Third, it helps us understand the new skills and capacities that will be increasingly necessary if we are to effectively address challenges ahead. And fourth, it points toward needed changes not just in what we think, but how we think. The cognitive changes that produce culturally mature perspective make possible new, more dynamic and encompassing ways of understanding.

CRITICAL NEW CHALLENGES

Before we turn more specifically to Cultural Maturity's cognitive changes, it helps to have a sense of the kinds of questions and challenges culturally mature perspective helps us address. Here is a small sampling of new questions that I've examined in depth in my various writings. In each case, making our way forward effectively depends on thinking and acting in ways that before now would have not made sense to us.

– WHAT DOES IT MEAN TO ACT MORALLY IN A WORLD WITHOUT OBVIOUS MORAL GUIDEPOSTS? Until very recently, culture, like a good parent, has provided us with clear moral rules. Our task has been simply to understand and obey those rules. Today, traditional moral guideposts are losing their past authority, and the moral relativisms that tend to replace them easily leave us feeling rudderless, this in an increasingly complex moral landscape. Cultural Maturity's cognitive changes offer that we might address moral questions with a systemic depth and nuance that has not before been an option.

– HOW DO WE KEEP FROM DESTROYING OURSELVES? Throughout our history, collective identity has depended on dividing our worlds into "chosen people" and "evil others." This way of defining who we are is becoming increasingly problematic. The nuclear genie is out of the bottle. And terrorism has become an inescapable threat. Our safety in the long term will depend on bringing greater maturity and sophistication to how we understand our human differences and how we relate to conflict. Integrative Meta-Perspective's more systemically encompassing vantage offers the possibility of getting beyond the polarized and polarizing assumptions of times past.

– HOW DO WE AVOID MAKING THE PLANET UNLIVABLE? Climate change, global industrialization, and the broader effects of growing human population threaten to make existence on the planet less and less pleasant. It is quite possible that the earth will eventually become unlivable even for us. If we are going to avoid such an outcome, we must step beyond our modern heroic mythology that makes limits only constraints to be overcome. Culturally mature perspective highlights how real limits are inherent to how living systems work and helps us engage them in the most creative ways.

– HOW WILL THE REQUIREMENTS OF EFFECTIVE LEADERSHIP CHANGE IN TIMES AHEAD? Trust in leadership of all sorts today is less than it was at the height of anti-authoritarian rhetoric in the 1960s. We could easily assume – and people have argued – that this modern lack of confidence in leadership reflects something gone terribly wrong – broad failure on the part of leaders, a loss of moral integrity on the part of those being led, or even an impending collapse of society. But if it does, there is little reason to have hope.

The concept of Cultural Maturity offers an explanation that is more optimistic, but also more demanding. It alerts us to the fact that what it means to lead is changing – and in all parts of our lives, from what it means to make the most personal of choices to what is required to effectively lead organizations and nations. Along with altering how we go about making decisions, these changes invite important reflection about possible next chapters in how we think about governance and structure our governmental institutions.

Leadership's new picture is not all positive. Today we reside in an awkward in-between time in these changes. When we do see leadership that begins to reflect culturally mature capacities, people are as likely to attack it as celebrate it. But if the concept of Cultural Maturity is correct, moving forward in how we embody and relate to leadership is both possible and essential.

– HOW WILL LOVE CHANGE IN TIMES AHEAD? Love might seem more a personal concern, less pertinent to big-picture cultural well-being. But certainly the topic is relevant to people's sense of fulfilment. Changes we see today with love are also directly pertinent to what relationships of every kind will require of us in times ahead.

Romantic love of the sort symbolized by Romeo and Juliet represented a powerful step forward from what came before it – having love's choices made by one's family or a matchmaker. But it can't be the last chapter in love's story. In fact, it was never really what we have thought it to be about. While we idealize such love as love based on individual choice, it was never quite this. With modern age romantic love, we

make the other person our completion – or white knight or fair maiden. Rather than love between whole people, more accurately what we have known is "two-halves-make-a-whole" love.

In a sense we have not known before, love today challenges us to in fact love as whole beings. Integrative Meta-perspective makes such more Whole-Person love newly possible. A related kind of change is reordering relationships of every sort. In the end, these changes challenge us to rethink not just relationship, but the nature of individual identity – and with this what it means to choose and to live purposefully.

~ WHAT WILL IT MEAN TO USE NEW TECHNOLOGIES WISELY? Technological innovations will be key to future advancement. But it is just as important if we are to have a healthy and survivable future that we are able to more effectively assess benefits and identify potential unintended consequences. These might seem like wholly technical tasks. But in fact carrying them out with the needed sophistication will require a maturity of perspective that we have not before been capable of. It has been our modern age tendency to treat technology as a god. If we continue to do so, our profound capacities as tool-makers could eventually be our undoing. Culturally mature perspective helps us get beyond technological gospel thinking and bring the nuance of understanding needed to apply new technologies wisely.

~ HOW MUST WE DEFINE PROGRESS IF OUR ACTIONS ARE TO SUCCESSFULLY TAKE US FORWARD? Progress as we think of it in modern times describes an onward-and-upward trajectory of increasing individuality and material achievement. While this definition has served us well, it cannot continue to do so going forward – for multiple reasons. Beyond the fact that it is not environmentally sustainable, it should prove less and less successful at giving our lives purpose. Compelling pictures of advancement must better take into account the full measure of human needs – not just individual accomplishment and material accumulation, but also human relationships, creativity, the health of our bodies, our larger sense of connectedness in life, and much more.

There is also a further critical reason why progress's past definition cannot continue to serve us that I will return to shortly. Fully grasping its implications requires some additional conceptual understanding, but it follows directly from how change processes in human systems work. What Creative Systems Theory calls "The Dilemma of Trajectory" describes how continuing on as we have would sever us from aspects of who we are that are critical to being human. If this conclusion is accurate, it is not just that clinging to progress's familiar definition would be unwise, doing so has stopped being an option. Our future depends on defining progress in more systemically complete ways.

CULTURAL MATURITY'S COGNITIVE REORDERING

I promised to return for a closer look at the cognitive reorganization that underlies Cultural Maturity's changes. Previously I described it as a dual process – at once more fully stepping back from and more deeply engaging the whole of our complexity. Here I'll draw briefly on a couple of ways of thinking about that complexity – our tendency to think in the language of polarity and the fact that intelligence has multiple aspects. Each provides particular insights.

Let's start with the role of polarity in how we think. Robert From observed that "It almost scares a man the way things come in pairs." With each stage in culture to this point, we've understood ourselves and our worlds in terms of qualities set in polar juxtaposition (mind versus body, leader versus follower, science versus religion, etc.). With Cultural Maturity's cognitive reordering we both step back from and more deeply engage such juxtaposed elements. In the process, we become able to appreciate them as aspects of larger system realities.

Creative Systems Theory brings detail to what we see. As a start, it addresses why we see polarity in the first place. The theory proposes that what most makes us human is our audacious tool-making, meaning-making – we could say simply "creative" – natures. It goes on to describe how our cognitive mechanisms are designed specifically to support this capacity for innovation. With regard to polarity, it delineates how the fact that we think in polar terms is a product of cognition's ultimately "creative" mechanisms.

We find the same basic polar progression with creative/formative change of all sorts – from an act of invention to the evolution of culture. Such change begins with a newly created aspect budding off from its original context. With each succeeding stage in formative process's first half, polar aspects become more separate, juxtaposing in evolving, creatively-predicted ways. With the second, more mature half of any formative process, polarities reconcile to create a new and larger whole. We come to experience the newly created aspect now as "second nature[4]."

This progression has critical implications for our time. We see how the fact that Integrative Meta-perspective helps us get our minds around apparent polar opposites – here at the largest of scales – is a

predicted consequence of our time in the culture's evolving "creative" story.

But we don't need Creative Systems Theory's detailed formulations to appreciate the basic relationship between polarity and Integrative Meta-perspective. F. Scott Fitzgerald proposed that the sign of a first-rate intelligence (we might say a mature intelligence) is the ability to hold two contradictory truths simultaneously in mind without going mad. His reference was to personal maturity, but this capacity is such an inescapable part of culturally mature perspective that we could almost say it defines it.

One of the most useful ways to think about how culturally mature perspective changes how we understand draws on a basic observation: Needed new understandings of every sort require that our thinking create links, "bridges" – and not just between phenomena we've regarded as different, but often between things that before now we've treated as complete opposites – as polarities.

We can think of Cultural Maturity's point of departure as itself a "bridging" dynamic. We step back and see the relationship of culture and the individual in more encompassing terms. Cultural Maturity bridges ourselves and our societal contexts (or put another way, ourselves and final truth). It is through this most fundamental bridging that we leave behind society's past parental function.

Importantly, Cultural Maturity is not about culture's role disappearing. Rather it is about a new and deeper recognition of how individual and culture relate – about how, through our thoughts and actions, we create culture, and how personal and cultural realities each inform the other. It is also about making our understanding of both what it means to be an individual and what it means to live in an interpersonal context more dynamic and complete.

This most encompassing linkage holds within it a multitude of more local "bridgings." Nothing more characterized the last century's defining conceptual advances than how their thinking linked previously unquestioned polar truths. Physics' new picture provocatively circumscribed the realities of matter and energy, space and time, and object with its observer. New understandings in biology linked humankind with the natural world, and by reopening timeless questions about life's origins, joined the purely physical with the organic. And the ideas of modern psychology, neurology, and sociology have provided an increasingly integrated picture of the workings of conscious with unconscious, mind with body, self with society, and more.

If the relationship between "bridging" and Cultural Maturity is to make ultimately useful sense, we need to make a couple critical distinctions. First, we need to clearly distinguish between personal maturity and Cultural Maturity. The ability to hold contradictory truths that F. Scott Fitzgerald described is a characteristic of wise thought at any time in history. In contrast, none of the last century's defining insights I just noted would have made sense before now. The "bridging" of cultural realities that the concept of Cultural Maturity describes is specifically a phenomenon of our time.

We must also avoid confusing "bridging" as I am using the term with more familiar outcomes (the reason I put the word in quotes). The result is wholly different from averaging or compromise, walking the middle of the road. And just as fundamentally it is different from simple oneness, the collapsing of one pole into the other as we commonly see with more spiritual interpretations. "Bridging" in this sense is about consciously engaging the larger whole-ball-of-wax picture.

Let's turn now to framing Integrative Meta-perspective in terms of intelligence's multiplicity. Doing so provides further nuance and also helps us put Cultural Maturity's cognitive changes – and their significance – in historical perspective.

Creative Systems Theory highlights how intelligence has multiple parts. Besides our rationality – in which we take appropriate pride – intelligence has other aspects, some more emotional or symbolic, others more sensory. This simple recognition by itself is new for many people. We are more accustomed to thinking of intelligence and reason as one and the same. Integrative Meta-perspective alerts us to the fact that more is necessarily involved. It also makes it possible to apply our multiple intelligences in newly conscious and integrated ways.

Most of what Creative Systems Theory has to say about our diverse ways of knowing is beyond our scope, but some general observations are important to note. Particularly significant is how Creative Systems Theory provides an explanation for just why we have multiple intelligences. I've noted Creative Systems Theory's claim that what most makes us human is our audaciously creative natures. Creative Systems Theory delineates how our multiple intelligences work together to support and drive creative/formative process.

The theory describes how we find a related intelligence-specific progression with every kind of human formative process – be it invention, individual development, or of particular importance for these reflections, the evolution of culture5. Different aspects of intelligence and different relationships between intelligences most define experience at different creative stages.

This observation has major practical implication. It provides the basis for Creative Systems Theory framework for understanding the workings of human systems. It also has major implications of a more philosophical and historical sort. Creative Systems Theory is significant not just because it provides important conceptual tools for making our way, but also because it successfully takes us beyond the kind of thinking that has defined modern age understanding.

Descartes described reality as a great clockworks. Machine-model thinking has made a huge contribution. It has given us not just scientific and industrial advancement, but our modern concept of the individual. But as numerous good thinkers have pointed out, machine-model thinking presents real problems if we wish to talk about living systems – and especially if we wish to talk about the particular kind of life we are by virtue of being human.

There is no more significant philosophical/conceptual challenge in our time than seeing if it is possible to address humans systems more directly in living terms. It turns out that any culturally mature notion in some way makes this important conceptual leap. Creative Systems Theory's use of a creative frame offers a way to do so that translates into a broadly applicable and highly delineated approach to understanding.

A closer look at Integrative Meta-perspective using the lens of multiple intelligences helps make this conceptual leap more understandable. I've described how Integrative Meta-perspective involves two, almost opposite processes. The first process, that more complete stepping back, at least differs from what we have seen in times past in all it involves. We become newly able to step back from both ourselves as cultural beings and from dimensions of ourselves – here intelligence's various aspects – that in times past did not allow such perspective.

It helps to contrast this result with what came before. Modern age thought similarly had its origins in a new kind of cognitive orientation. And stepping back from previous ways of knowing was a big part of it. We became better able to step back from the more mystical sensibilities that had given us the beliefs of the Middle Ages.

Along with this more general stepping back, rationality came to have a newly central significance. The rational now stood clearly separate from the subjective aspects of experience and became specifically allied with conscious awareness. The result was a new, as-if-from-a-balcony sense of clarity and objectivity. This, combined with the new belief in the individual as logical choice-maker that accompanied it, produced all the great advances of the Modern Age.

But while modern age perspective was a grand achievement, Integrative Meta-perspective's stepping back represents a different sort of accomplishment. With Cultural Maturity, awareness comes to stand more fully separate from the whole of our intelligence's systemic complexity – including the rational. Integrative Meta-perspective offers that we might step back equally from aspects of ourselves that before we might have treated as objective and those that we before thought of as subjective. In the process it offers that we might better step back from the whole systemic ball of wax whatever our concern.

Integrative Meta-perspective's complementary process is not just different from what we have known, it finds no parallel at all in earlier developmental changes. Along with stepping back, we engage who we are with a new depth and completeness.

We appropriately ask just what we newly engage with. Ultimately what we newly engage is the whole of ourselves as systems. Earlier I framed this more encompassing relationship with experience in terms of polarity. Just as well, we can frame it in terms of intelligence's multiplicity. We more deeply draw on the whole of intelligence – all the diverse aspects of how we make sense of things.

Culturally mature understanding involves the conscious involvement of more aspects of intelligence – more of our diverse ways of knowing – than before we've applied in one place. This requires not just that we be aware that intelligence has multiple aspects, but that in a new sense we engage, indeed embody, each of these aspects. Put in the language of systems, systemic perspective of a culturally mature sort requires that we consciously draw on the whole of ourselves as cognitive systems. Culturally mature understanding requires thinking in a rational sense – indeed, it expands rationality's role. But just as much it requires that we more directly plumb the more feeling, imagining, and sensing aspects of who we are. And this is so just as much for the most rigorous of hard theory as when our concerns are more personal.

In a more limited sense we have always drawn on all aspects of intelligence. In doing a math problem, talking with a friend, or painting a picture, we tap very different parts of our neurology. Integrative Meta-perspective produces a more aware relationship to our multiple ways of knowing than has before been possible. It also produces the ability to apply our multiple ways of knowing in newly sophisticated and integrated ways. These results will prove more and more critical in times ahead. Making sense of most anything about us – the values we hold, the nature of

identity, what it means to have human relationship – increasingly requires this more encompassing kind of understanding.

An important outcome when we frame Cultural Maturity in this way might at first seem contradictory. On one hand, because culturally mature perspective draws on multiple, often conflicting aspects of who we are, its conclusions are less absolute and once-and-for-all than those we are used to. But at the same time, we can appropriately argue that culturally mature understanding is more "objective" than what it replaces. Certainly it is more complete. Enlightenment thought might have claimed ultimate objectivity, but this was in fact objectivity of a most limited sort. Besides leaving culture's parental status untouched, it left experience as a whole divided – objective (in the old sense) set apposed to subjective, mind set apposed to body, thoughts set apposed to feelings (and anything else that does not conform to modernity's rationalist/materialist worldview). We cannot ultimately claim to be objective if we have left out half of the evidence. Culturally mature objectivity is of a more specifically whole-ball-of-wax sort.

The fact that we can understand Cultural Maturity in terms of cognitive changes has an important implication beyond just helping us understand what our times require of us. This fact supports being legitimately hopeful about what may lie ahead. I find it hard to imagine an ultimately positive – or even simply survivable – human future without Cultural Maturity's changes. If Cultural Maturity is a product of cognitive changes that as potential are built into who we are, the likelihood that we can thrive and prosper in times ahead increases significantly. And if this is a cognitive reordering that we can actively practice and facilitate, that likelihood increases further.

INTEGRATIVE META-PERSPECTIVE AND CULTURALLY MATURE CAPACITIES

I've proposed that one of the ways that the concept of Cultural Maturity most assists us is that it helps clarify the new skills and capacities that we will need if we are to effectively address future challenges. These reflections on the cognitive reordering that gives us culturally mature perspective provide the essential further step of clarifying how these needed new skills and capacities might be possible. Below I've briefly noted some of those new capacities and tied them to the new questions and challenges that I described earlier.

– LEARNING TO BETTER TOLERATE COMPLEXITY AND UNCERTAINTY: Cultural Maturity's cognitive reordering helps us both better tolerate complexity and think in ways that better take uncertainty into account. These new capacities will be essential to addressing any of the new questions noted earlier. Making effective moral decisions in our often contradictory-seeming world, addressing multi-layered environmental challenges, or the critical task of rethinking progress will each require thinking in more complex and dynamic ways. The ability to do so follows directly from how Integrative Meta-perspective works.

Because Integrative Meta-perspective more directly draws on our own systemic complexity, it helps us better make sense of and tolerate complexity in the world around us. For a related reason, Cultural Maturity's changes make us more comfortable in uncertainty's presence. Ideas become ideological – and thus expressions of last-word truth – when we make one part of a larger complexity the whole of understanding. When we engage understanding as a whole, uncertainty becomes, rather than some enemy of truth, intrinsic to any deep understanding of truth. Creative Systems Theory goes further to describe how both complexity and uncertainty are necessary ingredients in cognition's "creative" workings.

– GETTING BEYOND US-AND-THEM POLAR ASSUMPTIONS: I emphasized the importance of leaving behind "chosen people/evil other" polarizations on the world stage. I also described how relationships of all sorts are requiring us to connect not as halves that together make a whole, but as whole beings. Integrative Meta-perspective's more systemic vantage helps us re-own the projections that before have produced mythologized perceptions of both the demonized and idealized sort. We become better able to act in the world as whole systems and to engage other systems as whole systems.

– BETTER APPRECIATING THE FACT OF REAL LIMITS: Integrative Meta-perspective's more encompassing vantage reveals the limits inherent to any partial perspective. It also makes clear that whatever our concern, in the end limits come with the territory. Ideological beliefs, notions that take one part of our systemic complexity and make it the whole of truth, by their nature make claims for limitlessness. That they do has been a major part of their historical appeal. The greater maturity in the face of real limits that comes with Integrative Meta-Perspective applies to real limits of every sort – limits to what we can often do, limits to what we can know and predict, and limits to what we can be for one another.

– LEARNING TO THINK ABOUT WHAT MATTERS IN MORE SYSTEMICALLY COMPLETE WAYS: This new capacity applies to future-related questions of every sort – from the future of morality (where moral decisions reveal themselves to be less about choosing between good

versus evil, than about balancing competing goods), to the future of love (where Whole-Person love requires that we step beyond romantic projections and more directly discern when a human connection is life-enhancing), to our modern Crisis of Purpose (as we confront the need to define wealth and progress in ways that are more encompassing and complete). With Integrative Meta-perspective we become newly able to "measure" significance in ways that reflect the whole of who we are and the whole of anything we might wish to consider.

~ BETTER UNDERSTANDING HOW EVENTS HAPPEN IN A CONTEXT – HERE PARTICULARLY IN THE CONTEXT OF OUR TIME IN CULTURE'S STORY: Critical to needed new approaches to understanding is the ability to make more nuanced distinctions. These are necessarily not just more detailed distinctions but distinctions of a new sort. Observations made from modern age thought's rationalist perspective describe difference in this-versus-that, mechanistic, gears-and-pulleys terms. Integrative Meta-perspective lets us discern in ways that better reflect that we are living systems – and more specifically, human systems.

One important characteristic of this new, more encompassing and dynamic kind of systemic thinking is that we become much more attentive to context. With culturally mature truth, the when and the where is always as important as the what. Note that this is a wholly different result than relativity in some post-modern, anything-goes sense. Culturally mature understanding challenges us to make highly precise discernments that are able to be precise exactly because they take context into account. (We can think of Creative Systems Theory's framework for understanding purpose, change, and interrelationship in human systems as a set of tools for making such context-specific discernments.)

SUMMARIZING THE EVIDENCE

A radical concept like Cultural Maturity requires good evidence. Here I've suggested several sorts. The recognition that critical challenges before us require new human capacities provides an indirect kind of evidence. I've described how Cultural Maturity's changes make needed new capacities possible. This observation at least supports the conclusion that something like what the concept describes will be necessary.

Creative Systems Theory's more general developmental framework provides a more specifically conceptual kind of evidence. I've described how Creative Systems Theory identifies parallels in how human formative processes of all kinds evolve – from a simple creative act, to the growth of relationships, to individual human development, to the evolution of culture. The theory also delineates how we see related cognitive changes at parallel points in each of these kinds of change processes – including the point that marks mature understanding in each case.

Earlier I promised to return to an observation that makes Cultural Maturity arguably the only real option going forward. What Creative Systems Theory calls the Dilemma of Trajectory provides a particularly convincing kind of evidence. It describes how the changes that come with the point in formative process that our times reflect involve more than just letting go of one stage and moving to another. They bring into question the whole developmental orientation that has defined growth and truth. The critical quandary that results might seem a show-stopper.

We can describe the Dilemma of Trajectory in multiple ways. We can frame it using the language of polarity. Each stage in culture to this point has been defined by greater distinction between polar opposites and a greater emphasis on difference more generally. (In tribal times, connectedness to nature and tribe is primary; today it is materiality and individuality that prevails.) We can also frame the Dilemma of Trajectory in terms of intelligence's multiplicity. We've evolved from times in which the more creatively germinal aspects of intelligence – the body and the imagination – most informed experience (to be part of a tribe is to know the tribal dances and rituals) to times in which the rational – with a limited contribution from the emotional – holds the much larger influence (enter the Age of Reason). We can also describe this evolution using a more general language drawn from the study of myth. Culture's story has taken us from times in which archetypal-feminine influences ruled to times in which the archetypal masculine is much more the defining presence.

With our time, this organizing trajectory has reached an extreme. Truth has come to be defined almost exclusively by difference (for example, we objective and subjective as wholly separate worlds), rationality and understanding have become one and the same, and extreme archetypal-masculine values prevail (such as those of science and the marketplace). The Dilemma of Trajectory alerts us to how going further in this direction would not benefit us.

Indeed there is an important sense in which going forward as we have really stops being an option. We would not do well if we lost what remaining connection we have with nature, or bodies, or the more receptive aspects of experience that form the basis of human relationship. Proceeding further in this

direction would irretrievably alienate us from aspects of who we are that are essential to being human. We could go back – a proposal at least implied in certain kinds of social advocacy. But going back is not any more likely to get us where we need to go. The Dilemma of Trajectory confronts us with the fact that unless there is a third option, the human experiment may be at a conclusion.

The critical observation from this article's reflections is that the concept of Cultural Maturity describes such a third option. Integrative Meta-perspective reconciles the Dilemma of Trajectory. Not only does Cultural Maturity's cognitive reordering offer a possible way forward, the way forward it describes reflects an essential kind of human realization and fulfilment. If this developmental interpretation is accurate, Cultural Maturity becomes the only viable choice.

There are other kinds of evidence for the concept of Cultural Maturity. For example, there is how culturally mature perspective lets us answer questions that always before have left us baffled. In my book *Quick and Dirty Answer to the Biggest of Questions*[6], I propose that the reason many "eternal quandaries" have seemed beyond us is that culturally mature perspective is needed to ask them in ultimately useful ways. Some examples of such quandaries: How do we reconcile the experience of free will with what logically seems a deterministic world? Are the beliefs of science and religion just different, or do they represent parts of a larger picture? And, how do we best understand the human species' place in the larger scheme of things? I go on to offer straightforward – even simple – answers.

For me, the most compelling evidence for Cultural Maturity's thesis is the simplest. I don't see another way of framing the human task that is consistent with a future that is ultimately healthy or, if extended far into the future, likely survivable. If I have not missed something important, Cultural Maturity becomes the only game in town.

COMPARISON AS EVIDENCE

Teasing apart how Cultural Maturity differs from other ways of thinking about the future both provides clarity and serves as a further kind of evidence. I do this extensively in my writing[7]. Even a basic comparison would take an article of this length, but one specific kind of distinction is particularly pertinent to this discussion.

I noted in getting started that I don't tend to use the word "enlightenment." It is a fine term. But I take great care with language. There are a variety of outcomes that Cultural Maturity could easily be confused with. I take particular care with language that might seem to suggest some utopian result. When used simplistically, here this could be the case.

> We've seen how Cultural Maturity is very much about new steps in who we are and how we understand. We've also seen how the concept provides a basis for being legitimately hopeful about the future. And I've just observed how culturally mature perspective helps us address quite ultimate sorts of questions. But while all that might seem dramatic, Cultural Maturity is about something very basic and straightforward – about engaging now-timely developmental challenges.
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> Modern utopian views come in a couple of main forms. We find techno-utopian views that make new inventions our salvation. These views can go so far as to be almost enlightenment-like (using the most simplistic, popular interpretation of the word "enlightenment"). They may predict that future advances will bring us together as one great neural network or even provide eternal life. Other utopian views are more expressly spiritual. In a similar way, they see the future in terms of ultimate connectedness and realization, but the idealized destination is something more akin to Pierre Teilhard de Chardin's "omega point."
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> Utopian views of a spiritual sort are not new. Indeed they often draw for inspiration from times well past. (Most reflect some version of philosophical idealism – a way of thinking that has been around in both the West and the East for thousands of years.) The important observation here is that the concept of Cultural Maturity points toward a wholly different kind of result. Culturally mature perspective is no more concerned with the spiritual than the material. And it is very specifically about a sophistication of understanding that is only now becoming possible.

I often make use of simple hands-on methods that directly foster culturally mature perspective. I call them simply "parts work"[8]. Such approaches help a person more consciously recognize and draw on all the various aspects of who they are. For example, I may have a person sit in a chair and then place various aspects – like characters in a play – around him. As the work progresses that person learns to take authority from their Whole-Person chair while drawing creatively on all the various parts. Integrative Meta-perspective is a direct result (manifesting as personal maturity if that is the primary level of engagement, or Cultural Maturity if the parts have cultural as well as personal significance).

> The critical distinction for the task of comparison concerns whether a way of thinking reflects Whole-Person/Whole-System perspective (the systemic vantage of the Whole-Person chair) or the more limited perspectives of parts. More utopian views

– and ideological views more generally – reflect the perspectives of parts (a more scientific part, a more spiritual part, a more liberal part, a more conservative part).

Cultural Maturity is simply about engaging life's complexities in ways that are more conscious – and also more direct and courageous – than has been possible in times past. When we step into culturally mature territory, we do a better job of seeing things as big as they are. Previously I described Cultural Maturity as a needed new "common sense." I know of no better way to think of it.

AN AWKWARD IN-BETWEEN TIME

It is important to mention a further kind of evidence that could seem at first to prove the concept of Cultural Maturity wrong. A lot that we see in today's world might appear to be almost the opposite of what the concept predicts – for example, increasing political polarization and widespread denial with regard to essential limits-related challenges such as climate change. Given that we find so much in contemporary human behaviour that is at least stupid, if not ludicrous, it can be hard to believe that getting wiser as a species is a possibility.

It may not be. But, in fact, what we are seeing is consistent with what the concept of Cultural Maturity predicts. The concept describes how our times should be characterized simultaneously by essential advances and distorted ways of thinking. Creative Systems Theory calls this particular kind of ludicrousness Transitional Absurdity[9]. Some Transitional Absurdities come from "overshooting the mark" – extending assumptions that have long since stopped being pertinent. Others reflect regression in the face of our time's easily overwhelming demands. In either case unhelpful – even ludicrous – responses are the result. Like it or not, we live in awkward, in-between times.

The fact of Transitional Absurdity makes an odd kind of evidence. But if the notion does not accurately explain much in current circumstances, it is hard to be optimistic. Indeed, if modern ludicrousness is a harbinger of what lies ahead, it is pretty clear we are doomed. The concept of Cultural Maturity doesn't in any way promise smooth sailing through the transitions ahead (or at any time in the future). It also doesn't tell us how long this predictably turbulent time will last. But it does provide a way of thinking about the future that is legitimately hopeful. And it provides perspective that supports effectively making our way.

[1] The Institute for Creative Development website – www.creativesytems.org – contains links to the numerous Creative Systems Theory–related sites.

[2] Johnston, C. (2015), *Hope and the Future: An Introduction to the Concept of Cultural Maturity* (Seattle: ICD Press).

[3] Johnston, C. (2015), *Cultural Maturity: A Guidebook for the Future* (Seattle, ICD Press).

[4] *Ibidem*: 296.

[5] *Ibidem.*

[6] Johnston, C. (2015), *Quick and Dirty Answers to the Biggest of Questions – Creative Systems Theory Explains What It Is All About (Really)* (Seattle, ICD Press)

[7] Johnston, C. (2016), *Op. cit.*: 381.

[8] *Ibidem:* 421.

[9] *Ibidem*: 365.

JIM ROUGH

THE ToBE PROJECT[1]

HOW TO FACILITATE A GLOBAL "WE THE PEOPLE"

Jim Rough is a social innovator, consultant, speaker and author. While working as a consultant to a timber company in the early 1980's he developed Dynamic Facilitation, a way to help people release creativity and feelings for solving impossible-seeming problems. Since then he has taught the "Dynamic Facilitation and Choice-creating" seminar all over the world and through Dynamic Facilitation Associates (www.ToBe.net) has credentialed others who teach it as well. Jim also developed the "Wisdom Council Process," which supports large systems of people, like organizations and communities, to work together in solving difficult issues. Jim is co-founder of the Center for Wise Democracy (www.WiseDemocracy) and author of the book Society's Breakthrough! Releasing Essential Wisdom and Virtue in All the People *(www.SocietysBreakthrough.com).*

HOW CAN WE SOLVE CLIMATE CHANGE? WARS? Poverty? This essay describes how our socio-political-economic system causes these problems and how "The ToBe Project" can transform the system so we can solve them. It presents this strategy in four sections: 1) The nature of system transformation; 2) Four social innovations to achieve it; 3) The ToBe Project, a plan of action; and 4) The new socio-political-economic system.

SECTION 1 – THE NATURE OF SYSTEM TRANSFORMATION

I remember one night watching my wife give our baby niece a bath in the kitchen sink. The tot was enjoying herself, splashing in the water and playing with bath toys. But the toy that caught her interest most was the drain plug at the bottom of the sink. She didn't realize that it was different from the others. She wasn't thinking systemically. She was just playing. The toys are independent from one another and from the bath, so there is not much consequence to playing with them. But the plug was part of a system, and pulling it meant the end of her bath.

In society of course, we are like the baby. We largely assume there is no system and that we can consume products and create economic growth without serious consequences. But this behaviour threatens to pull the plug on civilization itself.

In another personal story, I once took a walk down the hill from my house, through some woods to meet a new neighbour. When I arrived, he was digging a series of trenches to handle a flood of water. I stopped to talk with him and marvelled at all the piping and ditches he had built. Then, rather than following the path I took a meandering route back home, generally following wet ground. A few weeks earlier, I had become frustrated when rainwater had caused a rut across the front of our gravel driveway. So I took my shovel and smoothed the driveway, redirecting the flow to a ditch nearby. Unknowingly, I had shifted the runoff from the entire hill toward my neighbour's house. Yikes! When I realized this I felt a rush of embarrassment that I had caused his problem. And I hurried to fix it. With just a few well-placed strokes of a shovel I solved his problem in a more comprehensive way than anything he could do. My simple action also solved issues for neighbours below him as well.

Interestingly, when I first saw the canal-building project, I didn't feel like offering to help. It didn't seem like my problem. But "stepping back" from the situation and seeing the system I felt a shift in my motivation. Now, it was easy for me to take responsibility. I wanted to help him and do what was best for the neighbourhood. The state of my driveway was secondary.

One point from this story is how, once we see the system, we may discover a simple solution that can solve many massive problems at once. Another point is how this seeing can transform our motivation from self-interest to serving the whole.

In this essay I'm suggesting a way that we – you and I – can facilitate all of us to step back, think together about our situation, see our system in a new way, and work together to develop a win/win response to our many problems. At the same time we should also notice that just engaging in this new collective thinking process, by itself, is a new more democratic system.

THREE POSSIBLE SYSTEMS FOR SOCIETY

There are three basic ways by which large numbers of people might organize themselves, the Triangle,

Box, and Circle: 1) The Triangle is based on hierarchy, where a "Great Leader" or king is ultimately in charge. 2) The Box is based on a set of agreements like a constitution, which is ultimately in charge. 3) The Circle is based on a conversation where all talk about what's going on and figure out together what's best. Each system has aspects of the others. It's just … what is the ultimate authority?

In the Circle we take "time out" on a regular basis, talk respectfully about what's going on, face our problems, evolve systemic understandings, build a shared vision of what we want, create breakthrough solutions, and work together to make them happen. True democracy can arise from this new empowerment of the people, where *We the People* are ultimately in charge. Also arising from this new conversation is an economic system where *We* act more like a global family than a global market.

Each of the three systems has a different underlying structure, promotes a different attitude in people, involves different leadership, generates different results, is appropriate in different situations, causes different kinds of problem and sparks a different kind of conversation.

The Triangle is driven by loyalty to the dictator, king, manager or "Great Leader." Power is top down, where people at each level know their place, limit themselves and their thinking, suppress diversity and idolize the leader.

The Box works well when people are independent. It was especially well suited for farmers, crafts people and fishers in the 18th century on the North American continent. At that time it was possible to establish a clear set of rules and leave the people alone to make their fortunes. This system is a competition within the rules, like a game. It encourages the pursuit of self interest, while generating innovation and results based on merit. Especially, it has assured new freedoms and rights for individuals and reduced the level of war. There is a longstanding desire to eliminate wars and conflicts by establishing the Box system at the global level. The aim is to begin by revising the United Nations, by uniting existing democracies, or by creating a world constitution. But these efforts seem completely blocked.

But even at the national level, the Box system is an inadequate way for us to manage our future. And besides it's breaking down. A competitive system can only work to the extent that people and institutions are independent. When they are inter-dependent, then special interests prevail over the public interest. For example, the Box system encourages people and organizations to take from common pool resources – like clean air, fresh water, the effectiveness of antibiotics, fertile soils, ocean fisheries, and the level of trust in the community. Each "special interest" then gains the benefits of these resources while the "public interest" bears the costs.

This scenario, putting the community at risk in pursuit of self-interest, is normal in the Box system because it sets up the "rules of the game" and then lets go. There is no coming together to talk things over or to figure out what's best for all. If there is a conversation about these issues it happens through "partisan politics," another competition that's turning from win/lose to lose/lose.

So even if the nationalistic chaos of our current global system with autocratic, democratic and failed states was replaced by a global constitutional system it's not going to work. We will find ourselves polluting the air, soils and water faster than those bodies can heal themselves. We will inexorably draw down the supply of fish in the ocean, add greenhouse gases to the atmosphere, and destroy the soils, water and species of our planet. The carrying capacity of our planet has already been reached. So we are inter-dependent more than we are in-dependent.

At this juncture in history, we must progress to the Circle system. We must stop and think periodically, check in to see what's going on, co-create shared vision, and support one another in creating the world we want. This conversation will likely establish a global social contract and institutions. More important than our ability to establish the constitution, however, is our ability to establish the ongoing *We the People* conversation.

How might we (you and I) spark this coming together of *We the People* at the global level? Conceptually, it's easy. We just need to call "time out" periodically where people can step back from ordinary life and talk about what's going on. And we need to facilitate everyone so that people want to engage in this conversation, so they talk respectfully and co-create a vision of what they want and how to get there. Then we need to call "time in" for them to go back to normal. Only of course, once we add this conversation, the old normal is gone. Because now we all see the systemic nature of our problems. And we have an experience of solving problems together. Plus, we have a way to provide responsible leadership to governments, corporations, nonprofit organizations and the culture in general.

SECTION 2 – FOUR ESSENTIAL SOCIAL INNOVATIONS

Four social innovations make it possible to for us grow the Circle system.

The first social innovation is to give this special kind of "time out" a name. We call it a "ToBe" (#1).

Mentally taking a "time out" is an old practice sometimes involving meditation, prayer, vacation, retreat, noticing what's happening, etc. A ToBe is where people step back from normal life, face difficult problems creatively, seek what's best for all, and achieve unity on what to do. Then in a few months we convene another ToBe, either going further with the same issue or picking another.

A second social innovation is the "Wisdom Council Process" (#2). Here's how we can convene ongoing ToBe's in large systems of people, even the global system. The Wisdom Council Process was first conceived in 1993. Since then there have been many experiments with it among members of organizations, employees of corporations, participants in conferences, and citizens of communities, cities, and states. Government leaders in the state of Vorarlberg, Austria, for example, used the Wisdom Council Process to address the refugee issue, facilitating a diverse microcosm of people to speak with one voice on this issue. Basically the Wisdom Council said, "Yes, we need to protect our culture from taking in too many refugees and from the dangers of extremists. But our primary attitude should be one of helping these people." The Wisdom Council also articulated a way to do this. Afterwards, one elected official enthusiastically responded, "The Wisdom Council is like wind at my back." Until the Wisdom Council spoke it was politically unacceptable for him to express this position. Now, he felt support, even leadership from citizens on the issue[2].

In another example, a food cooperative used the Wisdom Council Process to help resolve a long-standing controversy among the Board of Directors. The Wisdom Council expressed the wise and thoughtful voice of the membership and the controversy melted immediately.

Here's a brief description of how the Wisdom Council Process can spark the people to come together as *We the People*. Every four months or so, twelve to twenty-four people from the world's population are randomly selected in a kind of lottery. These people are gathered in one location as a symbol of the world's people. This Wisdom Council meets for a few days with someone skilled in "Dynamic Facilitation". Dynamic Facilitation (#3) is the third social innovation. How it works is described below. Using it the people selected to the Wisdom Council can face "impossible" issues that involve strong emotions like climate change, the refugee issue, poverty, and racial prejudice in a heartfelt, creative way. The emotions and diversity of views help the group achieve shifts and breakthroughs, and reach unity just a couple days.

Then there are "global community meetings" where the Wisdom Council can share its unity, plus the story of how the shifts and breakthroughs led to the group results. Participants at community meetings and those online are invited to talk in small groups about what they've heard and express their reactions. Then people hear how the broad audience is reacting and often start realizing "Maybe we are all together on this issue!"

Most often the response of people hearing the Wisdom Council members speak their unity is something like, "Yes! I think so too. Why haven't we been talking like this before?" So, it's a way that a huge population can use a small group of people as symbolic representation of all, to help it face big issues creatively and come together. These gatherings can happen in multiple locations, at different times, in different languages, and through different venues. The original Wisdom Council disbands. But then in a few months a new random Wisdom Council is brought together to help the whole-system conversation move forward another step.

Wisdom Councils have no official power. Everything about them is voluntary. Each Wisdom Council meets, presents, and goes away. But the overall process facilitates the essential missing whole-system conversation where we can all get involved and speak freely about the important issues. It sparks a "seeing" of the systemic connections, new attitudes, relationships, ideas and actions. People who are usually marginalized find themselves being heard and valued. Shared perspectives develop that most everyone can get behind. Plus the inclusive, creative tone builds an overarching spirit of trust and community.

With enough money and media support, ordinary people like you and me can start this process at the global level. We don't need anyone's permission to begin.

The magic sauce is choice-creating

The Wisdom Council Process was originally conceived in 1993 and brought forward in my 2002 book *Society's Breakthrough! Releasing Essential Wisdom and Virtue in All the People.* Since then we've learned a lot. Especially, we learned that the magical-seeming results are due primarily to the particular kind of thinking the Wisdom Council Process evokes, what we call "choice-creating."

Choice-creating is the fourth social innovation (#4). It's a name we've given to the kind of thinking that often happens during or after a crisis, when people put aside their old views, roles and prejudices to work with others open-heartedly. It's the kind of thinking where people face an impossible-seeming issue and rise to the occasion. In choice-creating we let go of our roles and preconceptions. We speak with feeling and appreciate the different views of others. And we are creative, not judgmental. Progress happens largely through shifts

and breakthroughs rather than through agree/disagree discussions, negotiation, deliberation, brainstorming, dialogue, problem-solving or decision-making. Dynamic Facilitation can reliably evoke the spirit of choice-creating in the small group of the Wisdom Council. Maybe we can't always expect a breakthrough, but we can expect group progress through *shifts,* where people see issues in new ways, where they feel differently, trust others and come to wise group unity.

A story that continues to have meaning to my family and myself illustrates the connection between a ToBe and choice-creating. Many years ago, we took a drive in the mountains to have a cookout with our young son and his friend. We were going to a campground that on the map appeared to be two or three miles off the main highway. We arrived at the turnoff, a small dirt road, and began a winding drive.

Time passed and as we had gone five or six miles, my driving became more intense. We had not seen another car in either direction and there were no road signs. I rounded the curves more tightly, and everyone became impatient with finding the camp. Finally, we came upon a car approaching from the opposite direction. We flagged it down and asked the driver how much farther it was to the campground. The answer was a shock – another 18 miles of slow dusty mountain road!

I started driving again, but then we did something we later realized was crucial. We stopped the car. We sat for a minute by the side of the road and talked about what we wanted, how hungry we were, when we were going to eat, etc. After mulling the situation and examining our feelings, we kept going.

A little farther on we came to a beautiful valley and got out to take a picture. A little farther yet, we discovered an apple tree and the boys brought us each an apple. The impatience we had been feeling changed to enjoyment. We arrived at the campground, surprised the time had gone so fast. Our trip, hurrying to a destination, had been transformed into a beautiful country drive, a creative enjoyable time.

Prior to stopping the car we were *deciding* between two options: 1) keep going or 2) turn around. Neither seemed acceptable. But in stopping the car we unknowingly shifted our thinking from *decision-making* to *choice-creating*. Unknowingly, we had created a third choice… to enjoy a beautiful country drive. Probably you have had experiences like this. Later we talked about the importance of stopping the car, the ToBe, and how it sparked a different quality of thinking. We just need to help society do the same thing.

Most people use the English words *decision* and *choice* interchangeably. They see it all as a decision process, like when we created a third choice we still had to make the decision. No, to spark the desired change in society we need to think differently: a *decision* is an act of judgment, while a *choice* is the outcome of a creative process. "Decision-making" arises from a deliberative process of weighing available options, selecting the best, and discarding the rest. It's casting away unwanted options, feelings, perspectives and even people. "Choice-creating" on the other hand is a process of inclusion, where we hold all thoughts, options, feelings and people, allowing a new clarity to emerge. Often this new clarity is a *shift* where we just know what to do. The shift comes with a new set of feelings that were not available before.

Since judgment and creativity cannot co-exist, *decision-making* and *choice-creating* are mutually exclusive. So when we use the words "choice" and "decision" interchangeably we are in danger of losing track of the creative possibilities that choice-creating provides.

DYNAMIC FACILITATION EVOKES CHOICE-CREATING

For us to facilitate the new Circle system and empower the people to solve big impossible problems, we don't need that people understand the special nature of choice-creating or understand how Dynamic Facilitation evokes it. Generally, they can just join into the new conversation or not, depending on their interest. We just want to structure this conversation so it is meaningful and enjoyable to them, where they can talk freely, see progress from the conversation and feel appreciated for their contributions.

However, in this essay I want to give a taste of what Dynamic Facilitation is and how it reliably evokes choice-creating in small groups like the randomly selected Wisdom Council. The facilitator trained in this process (DF'er) works with the energy of people rather than stepping them through an agenda or using guidelines for control. The energy might originate with fear about the problem or anxiety, a conflict, some idea that's stuck, or some frustration with others.

The DF'er sets the room in a half-circle of chairs facing four charts – Solutions, Data, Concerns, and Problem-Statements. These charts are used to capture and reflect what's going on in the meeting, to have a place for each individual comment and to hold the group perspective as well. For example, if one man starts to share his strategy about what should happen to address the problem, the DF'er writes it down on the chart of Solutions. Then if someone else starts to question or disagree, the DF'er asks that person to talk to her. She will then record that comment as a Concern, and ask, "So what would be your solution?" Then she writes that down on the chart of

Solutions. Then she goes back to the first person, to help him finish his answer.

Using this approach, no one is judged. There is no agreeing or disagreeing. Each comment is valued and added to the charts as a piece of the puzzle. The DF'er helps each person share from the heart, keeping everyone safe from judgment. This allows people to drop their roles, become authentic and grow in creativity. People speak freely and seek answers that everyone supports.

After the terrorist attack of 9-11, for example, I was teaching a seminar on Dynamic Facilitation. People were in small groups to practice the skills. Each group was asked to choose an impossible-to-solve issue they cared about. With some encouragement, one group chose the topic of "terrorism."

Often in meetings people show up with answers. But not this case. People were still taking in what happened. For a while all they could do was share information, which was captured on the chart of Data. With prodding however, the DF'er asked someone to say what he would do if he was in charge. That person started to express his solution idea, how he would use diplomacy. But one woman reacted, starting to judge, "that won't work because…." The DF'er jumped into the middle, turned this judgmental remark into a concern. And then asked the woman to express what would be her solution. She started to say something, pretty much what others had been saying. Then she became quiet. Her energy of criticism and frustration disappeared. Tears rolled down her face. Haltingly she said, "I don't know. I'm just terribly afraid."

That shift to authenticity was a sea change for the group. After a period of silence someone said, "I'm realizing that when I feel like a terrorist, I just want someone to listen to me." The DF'er wrote this down as a new solution idea: "Find some way to listen to the terrorists." And this sparked a burst of energy as people started thinking of ways this might work. As the session continued people became more empowered about what they could do and the group determined a new statement of the problem: "How can we create a global listening capability to hear the voices of marginalized people and potential terrorists?" This excited the group, by how the UN, or citizens, or churches could actually set this up.

In this small group people shifted from not wanting to face the problem to feeling overwhelmed by it, to feeling empowered about solving it, to being excited about a new vision for the world. After the exercise was over they were able to look backward in appreciation to the woman who started sniping at the group. Her feelings of frustration and fear were key to sparking the shifts that enabled choice-creating. In normal meetings these expressions of frustration are avoided. They can easily ruin group progress. In fact, group guidelines might specifically forbid criticizing the ideas of others. But with Dynamic Facilitation these frustrations and criticisms can become contributions.

THE WISDOM COUNCIL PROCESS EVOKES CHOICE-CREATING IN LARGE SYSTEMS

Dynamic Facilitation is for small groups. The Wisdom Council Process is a way to extend the range of Dynamic Facilitation to encompass large systems of people.

Here is the basic design: we randomly select a small group from the world's population. They are DF'er to enter into the spirit of choice-creating where they face some impossible-seeming problem like nuclear threats or climate change and come to unity. Then they present this unity and the story of how they achieved it in a global ceremony. Then everyone is encouraged to keep talking through the web, media, and face-to-face in a spirit similar to choice-creating. Then in a few months another Wisdom Council is randomly selected and the whole-system conversation continues another step, building a shared perspective, a vision of what's possible and a widely accepted strategy for achieving it.

So how does the spirit of choice-creating in the Wisdom Council get transmitted to all of society? One point to remember: Choice-creating is different than problem-solving or decision-making. If the small group were analyzing and deliberating among a set of options, voting on which is best and presenting their results it wouldn't work. But in this process, a small symbolic group faces an impossible challenge, one that affects all of us. And they make surprising progress. And they tell the story of their heroics, how they accomplished the miracle of reaching unity on a description of what is going on and what to do. People respond to the story. It's our issue. The one we are working on. This is part of *our* journey, one that continues between Wisdom Councils.

In the terrorism example described above, you may have been reading that story in a spirit of resonance, feeling relief as the group overcame their stuck period and support for their results. This is an example of what the Wisdom Council Process aims for. The purpose of the Wisdom Council is NOT to make a recommendation about which people agree or disagree.

Instead, the purpose of the Wisdom Council is to help the whole population engage this issue and continue building on what the small group started. Each new Wisdom Council helps articulate the progress we are all making together. Our job is to invite everyone in

the global system to know about and become part of this conversation, working on issues that matter, valuing different people and co-creating win/win solutions.

Before we talk about the specifics of *The ToBe Project*, I'd like to note that although I was just an observer for the conversation on terrorism, it affected me in a way that lasted well beyond the seminar. For instance, now I'm writing an essay describing how we can create this global listening apparatus, with confidence that it can happen and that it will work. Choice-creating conversations often stir this kind of resonance in the field of thinking, so all kinds of changes can begin to self-organize.

SECTION 3 – "THE TOBE PROJECT," THE PLAN OF ACTION

Below I've described *The ToBe Project* in three phases and eight steps. Notice each phase and each step is doable. There is nothing impossible about setting this up. For potential organizers it's just a matter of experiencing and understanding the theory enough to have confidence that this will spark the needed systems change. But even if someone cannot appreciate the potential for systems change, it's straightforward to see that each step by itself would yield immense benefits to society. And if there is any risk it's really hard to find.

PHASE 1 ~ GATHER THE CONVENERS

First, a core group of people interested in this approach comes together to understand how it can work and to plan a strategy. This group meets face-to-face in a DF'er setting. Topics may include:

A ~ How are issues selected for the Wisdom Councils?

B ~ How to gather a truly random selection of citizens from the world?

C ~ How to assure adequate funding? Media support? Computer networking capability?

D ~ How to handle different languages within the Wisdom Council? In the presentations? In the global conversation?

E ~ How to assure a global audience for the Wisdom Council presentations?

F~ How to facilitate one global conversation that continues after the Wisdom Council presents?

G ~ How to help national governments and international organizations like the UN, health organizations, the EU, etc., see this as an asset to their aims so they take advantage of it?

H ~ How to assure that Wisdom Councils are ongoing and that they become officially structured into the international system?

PHASE 2 ~ SET UP THE GLOBAL WISDOM COUNCIL PROCESS – "THE TOBE PROJECT"

Here are eight steps the conveners will likely structure.

1 ~ DETERMINE THE ISSUE. The issue can be preselected by the convening group or the global population, or by each Wisdom Council itself. It should be a hot, ill-defined impossible-seeming issue like global warming, wars, poverty, racism, etc.

2 ~ RANDOMLY SELECT GLOBAL CITIZENS. Use a lottery process to select 12-24 people from throughout the world. This should be done periodically, possibly three Wisdom Councils per year. The task of gathering people can be turned over to an internationally respected polling firm.

3 ~ PROVIDE WHAT'S NEEDED SO THE WISDOM COUNCIL CAN ADDRESS A HOT ISSUE AND REACHES UNITY. Each global Wisdom Council will gather in a different city. They will work with people skilled in Dynamic Facilitation. The meeting should last three to five days, less than one week. They may need a short presentation by different stakeholders on the issue, to kept short – less than one half-day.

4 ~ ASSURE A LIVE FACE-TO-FACE "GLOBAL COMMUNITY MEETING". Immediately after each Wisdom Council there should be a large, live media event, where the Wisdom Council presents its unity and the story of how this unity was determined to an on-site and a live broadcast audience. Then all are invited to talk in small groups, hear from one another and report their level of resonance with the conclusions. Then they have the opportunity to "look around" the virtual room and notice the extent to which all share this perspective.

5 ~ PROVIDE FOR MANY REMOTE GATHERINGS. Help community organizers, NGO's and governments convene local events where people gather, hear the Wisdom Council presentation, visit in face-to-face conversations, and report their conclusions.

6 ~ PROVIDE FOR ONE ONGOING WHOLE-SYSTEM GLOBAL CONVERSATION. Between Wisdom Council presentations there should be a way each person can continue talking about these issues, as much as possible in the spirit of choice-creating. Using social media and web-based technology we can set up safe, anonymous small group gatherings, so people from around the world can meet and talk.

7 ~ PROVIDE FOR RESPONDER MEETINGS. Encourage governmental agencies, NGO's, stakeholders and experts working on the issue to come together in different regions. These meetings can be in "Open Space" format where attendees consider the perspective of the Wisdom Council and coordinate their responses.

8 ~ SUPPORT THE CHARTERING OF THE WISDOM COUNCIL PROCESS. Ultimately the Wisdom Council Process

should be added to the charters and constitutions of nations and global institutions. This assures that the process is ongoing so *We the People* can come into being and assert ongoing leadership.

PHASE 3 ~ SUPPORT EMERGENT RESULTS

The ToBe Project promises two kinds of benefit: 1) *Improvements to our system* and 2) *Transformation of our system*. So far we've talked almost exclusively about the need for system transformation to the Circle system. We've considered how, as we become more inter-dependent, our current Box idea of democracy is breaking down. And we've shown how the *The ToBe Project* can facilitate the choice-creating *We the People* conversation needed for the next level of democracy.

But before we talk more about system transformation, consider how the steps of *The ToBe Project* offer breakthrough improvements to our society. In fact, the benefits of each step probably outweigh the costs, risks and effort involved.

Some improvements to be expected from *The Tobe Project* are:

1 ~ ESTABLISHING NEW SYMBOLS OF GLOBAL COOPERATION. Just picking an issue and drawing attention to it can be a powerful way to spark people and organizations to coordinate their efforts. Randomly selecting people and bringing them together in one place is another powerful symbol. Taking their picture, along with the story of their individual journeys, could become a transformational meme in the same way as the first picture of earth from space.

2 ~ REMOVING BLOCKS. Political gridlock exists in many nations, holding back important change. For example, powerful interests encourage people to stay in denial about the reality of climate change. But when the Wisdom Council speaks with unity on this issue, this could catalyze a shift in our collective denial, helping us all to acknowledge the issue, adopt new technologies and support needed policy changes.

3 ~ SOLVING IMPOSSIBLE-SEEMING ISSUES. Some issues are described in terms like "a decision between two options," like when autocratic leaders threaten to use nuclear weapons. But a Wisdom Council of the world's people could open a new door of possibility. It's a "stopping the car" where national leaders take a back seat, and where the world's people co-create the new choice.

4 ~ ESTABLISHING NEW LEADERSHIP. When the Wisdom Council emerges from its meeting it does so with a perspective on what is going on and a shared vision of what we need to do. This perspective is resonant with people. It's a way that a large system of people can self-manage, not just to say "yes" or "no" to some top-down proposal. But this is a way *We* can think through issues and provide responsible proactive leadership in heading off ecological disasters, for example.

5 ~ FACILITATING THE NEW PUBLIC CONVERSATION. After the Wisdom Council speaks they disband, but they model and promote a new way diverse people can work through issues. In the new conversation we include minority views. We appreciate diversity and the voices of disenfranchised people. Here's a constructive way to address and solve the "fake news" and "hate radio" conversation of the present. We do it by having a way to hear these voices along the way in our process of arriving at shared truth.

6 ~ EDUCATING ABOUT THE ISSUES. This is a shared exploration of difficult issues. And it's a shared exploration of possible solutions issues around those solutions. For instance, in the "responder meetings" experts, elected officials, agencies and NGO's who know a lot about these issues are presented with a prime opportunity to educate people on what they've discovered. For example, people who fear vaccines will have a safe way to re-examine fears, anecdotes and scientific evidence in making personal decisions.

SECTION 4 – "THE TOBE PROJECT" EVOKES THE NEW SYSTEM

"We need to...." People often use these three words when starting a conversation about society's most pressing issues. In looking at the issue of global warming, for example, they might say, "We need to reduce our carbon footprint." Or "We need to get money out of politics." Or, "We need to change our economic system." Or, "We need to enact a global carbon tax." Who is the *We* that is capable of making these changes? Is it all of us as individuals? The United Nations? The rich and powerful elite? A group of national representatives? No, presumably, it's all of us acting together as *We the People*. If this *We* existed, then we could implement the solutions. *We* would just figure out what's needed and choose to do it. Plus, *We* wouldn't have caused these problems in the first place.

Lots of work is being put into developing "solutions," articulating what happens on the right side of this phrase, the "We need to's..." But if you and I work with the left side and facilitate *We the People* into existence, which changes everything. It has the potential for solving all the problems.

The phrase *We the People* means something different than what most people imagine. It's not a big gathering of people in the streets demanding change. Nor is it an overwhelming vote in favour of or against some candidate or policy. *We the People* is when all

the people of a large system face problems together, get clear about what they want and work together to make it happen. It's a new system of self-governance.

Many people imagine this *We the People* will come into existence naturally once the crisis of civilization comes upon us. In the face of this crisis they expect we'll all pull together, elevate our thinking and overcome the challenge. And after the crisis passes we'll restructure our systems to fit the times in which we find ourselves. Many assume this restructuring will build on models currently being used in local communities and organizations. For instance, there are state and city banks, local land trusts, nonprofit credit unions, business co-ops, and investment circles, which have proven themselves to work. So perhaps in this crisis, we will "scale up" these models to replace our current economics. I wouldn't bet on this. But I would bet on *The ToBe Project*.

The ToBe Project is similar but more reliable. It also relies on the inherent power of crises to bring people together and accomplish miracles. In *The ToBe Project* we face an impossible-seeming issue, only we are also facilitated into the spirit of choice-creating. We address this impossible-seeming issue in a way that sparks shifts and breakthroughs and brings people together. And we keep doing it into the future. Plus, with *The ToBe Project* we start now before the crisis happens in its full fury.

By establishing regular moments of "stepping back to think," *The ToBe Project* provides the necessary structural adjustment to our chaotic global system that allows *We the People* to provide responsible leadership to governments, organizations and people. For instance, here's a new way to set up a global constitution and legislature to practically eliminate the prospect of wars between nations. But as described this desirable structuring for democracy, the Box system, is not enough. Ultimately for our society to work today, we need a transition to the Circle system. And that's the real purpose of *The ToBe Project*.

This offers the prospect of "true democracy," where "the people" actually are in charge. Where they responsibly self-govern in a way that serves life. Of course, this doesn't mean that the natural motivation of self-interest, to "win the game," would go away. This project doesn't touch the existing structures of government or the marketplace. It just stops the action long enough in short bursts so can explore what's really happening, talk creatively together and choose what we want.

In economics there are big questions to answer like "What products shall we produce?" "How shall we produce them?" "Who gets the benefit?" "What resources shall we use?" and "How should we each contribute?" In our current system we trust the market to answer these questions. But lately something is going wrong with that market mechanism. Today, when our food industry maximizes profits, it reduces the nutritional value of our food. When our health industry maximizes profits it keeps people chronically ill. When our defence industry maximizes profits we unnecessarily go to war. When our media maximizes profits the level of partisan gridlock and disinformation soars. Obviously, a continued reliance on this approach to answering the economic questions is ultimately life-threatening.

The ToBe Project promises to set up a self-management system where we take responsibility for answering many of these questions directly. It's a new economics beyond capitalism, socialism, communism, feudalism and the other "-ism's." It's "Circle system economics," where we still work with the market but where we also talk things over and figure out together what we want. It's where *We* thoughtfully and continually restructure our institutions so they work for people.

I hope you see from this essay that there is a way to establish the kind of global conversation we all want, where we come together as "We the People." The steps are doable and accessible. The Wisdom Council process has already demonstrated its effectiveness in supporting large systems of people to think creatively together and generate wise collective change. We know that it can elevate the quality of public conversation where people listen more, contribute more and where they are more open to different ideas.

Key in all this is for some of us to distinguish choice-creating from decision-making, and to recognize that using Dynamic Facilitation, for example, we can reliably evoke choice-creating in groups of people. But most people do not need to be acquainted with these theoretical underpinnings. They just need to care about the issues being addressed by Wisdom Councils, hear about the results, and share their ideas with others. This is all it takes to facilitate one global "We the People" conversation, where *We* face one issue, make progress together, and feel empowered as *We the People*.

Of course, Wisdom Councils should also happen at all levels of society, not just globally. They should happen at the national level for each country, plus in cities, states, communities, corporations, government agencies, schools, etc.

♦

1 *The ToBe Project* is a project of the Center for Wise Democracy (www.WiseDemocracy.org).

2 See a five min video in English on this at <http://bit.ly/2rKo7Zw>.

BRUCE H. LIPTON

AN INTRODUCTION TO CONSCIOUS EVOLUTION:
A THEORY WE CAN THRIVE WITH

Bruce H. Lipton, Ph.D., stem cell biologist and bestselling author of The Biology of Belief, Spontaneous Evolution *and* The Honeymoon Effect, *served as Associate Professor of Anatomy in the School of Medicine at the University of Wisconsin (Madison, 1973-1982). In the medical curriculum, Bruce lectured in Cell Biology, Histology and Embryology. His pioneering research on cloned human stem cells presaged today's revolutionary new field of Epigenetics. Dr. Lipton later served as a Research Fellow in the Department of Pathology in Stanford University's School of Medicine (1987-1992). Groundbreaking research at Stanford revealed the nature of the biochemical pathways by which the mind (perceptions/beliefs) controls behaviour and genetic activity. In addition to being listed in the top 100 of "the world's most spiritually influential living people" by United Kingdom's Watkins Journal, Bruce received the 2009 prestigious Goi Peace Award (Japan) in honour of his scientific contribution to world harmony. Bruce has lectured in 7 of the 8 continents, and is still awaiting an invitation from the penguins to present in Antarctica.*

HUMAN CIVILIZATION IS AT AN EVOLUTIONARY crossroads where unsustainable human behaviour is precipitating the planet's 6th Mass Extinction Event[1]. Five times in Earth's history, life was thriving when some event precipitated a wave of extinction, eliminating 70 to 90 percent of all plant and animal species. The last mass extinction event, 66 million years ago, noted for wiping out the dinosaurs, was apparently due to a massive asteroid impact in Mexico that upended the global web of life. Today's severe environmental imbalance is, in large part, attributable to the cultural consequences of Darwinian evolution theory, which holds that struggle and competition are the driving forces behind evolution. But the Darwinian notion that evolution is driven by the survival of the fittest in a continual competition among individuals is giving way to a more scientifically accurate, as well as, more positive theory of evolution that emphasizes the role of cooperation, interaction, and mutual dependence among all life forms. In the words of Lynn Margulis, "Life did not take over the globe by combat, but by networking"[2].

The once universally accepted Darwinian theory about the origin and evolution of life emphasized a two-step process to account for evolution. First, random variations in hereditary traits, introduced during reproduction, provide offspring with physical and/or behavioural characteristics that differ from those of their parents. Second, the fate of "altered" individuals, specifically their ability to survive and pass on their "new" traits to the next generation, is determined by natural selection, a process often abbreviated as the "survival of the fittest in the struggle for life." From this perspective, violence and war are considered to be natural behaviours in determining the "fitness" of our species. Evolution results from a continuous lineage of species expressing ever-increasing structural and behavioural complexity.

Ernst Haeckel famously illustrated the Darwinian progressive lineage of species evolution in his 1879 image of the Tree of Life. Primitive bacteria were positioned at the Tree's base, while human beings, perceived as the most advanced species, were placed at the Tree's top branches (FIGURE 1 NEXT PAGE)[3].

At the time Haeckel conceived of the Tree, there was no scientific insight about the nature of the hereditary mechanisms responsible for the evolution of the depicted species lineage. More than a decade earlier, Catholic monk Gregor Mendel's experiments with crossbreeding pea plants between1856 and 1863 had introduced the concept of "genes," though it was Danish botanist Wilhelm Johannsen who first introduced the term gene in 1909. Mendel's seminal research, which founded the modern science of Genetics, languished in obscurity for over three decades before it was resurrected in 1900 by botanist Hugo de Vries, whose own breeding experiments verified Mendel's conclusions.

Two years after Mendel's work resurfaced, research by cytologist Theodor Boveri connected Mendel's concept of genes with the function of chromosomes, thread-like structures observed in the cell's cytoplasm. Boveri's experiments manipulating chromosomes as well as his observations of chromosomes in normal and cancer cells, led him to conclude that chromosomes are the physical units of heredity alluded to

in Mendel's research. In an effort to understand the true nature of a "gene," chromosomes were chemically deconstructed and found to be comprised of 50% protein and 50% DNA. The question as to which of these macromolecules provided the trait-controlling genes was resolved in 1944 with Avery, MacLeod, and McCarty's research that included two morphologically distinct species of pneumococcal bacteria[4]. When incubating bacterial species R in a DNA extract from the chromosomes of species S, the R bacteria acquired species S traits. In contrast, extracts of species S chromosomal proteins were unable to transfer S traits to species R bacteria. The results firmly established that DNA molecules are the carriers of genetic information.

The next step toward understanding evolution was to assess the nature of DNA's molecular structure in order to gain insight into the mechanics of heredity. X-ray crystallography studies of DNA molecules by Rosalind Franklin in 1952 led to the discovery of DNA's double helix structure. Without her knowledge, Maurice Wilkins, a disgruntled colleague of Franklin, gave her unpublished crystallography data to James Watson and Francis Crick. Using Franklin's data, Watson and Crick changed the course of human history when their article, "Molecular Structure of Nucleic Acids" was published in the prestigious British scientific journal *Nature* in April of 1953[5]. In their paper, Watson and Crick revealed how the sequence of nucleic acid bases (adenine, thymine, cytosine and guanine) along the DNA molecule programs the structure of proteins, the macromolecules that provide for an organism's anatomy and physiology.

The next challenge was to discover the mechanism that controlled the synthesis of DNA. Matthew Meselson and Franklin Stahl revealed the surprising answer to that quest in 1958 when they separated the two strands comprising a DNA double helix molecule and incubated each single DNA strand in a solution containing the four nucleic acid bases that comprise the molecular building blocks of DNA. Each DNA strand served as template for the synthesis of its complementary new strand. During cell reproduction, the DNA double helices split apart with each separated DNA strand serving as a pattern for recreating the double helix. The "obvious" conclusion was that DNA controls its own reproduction.

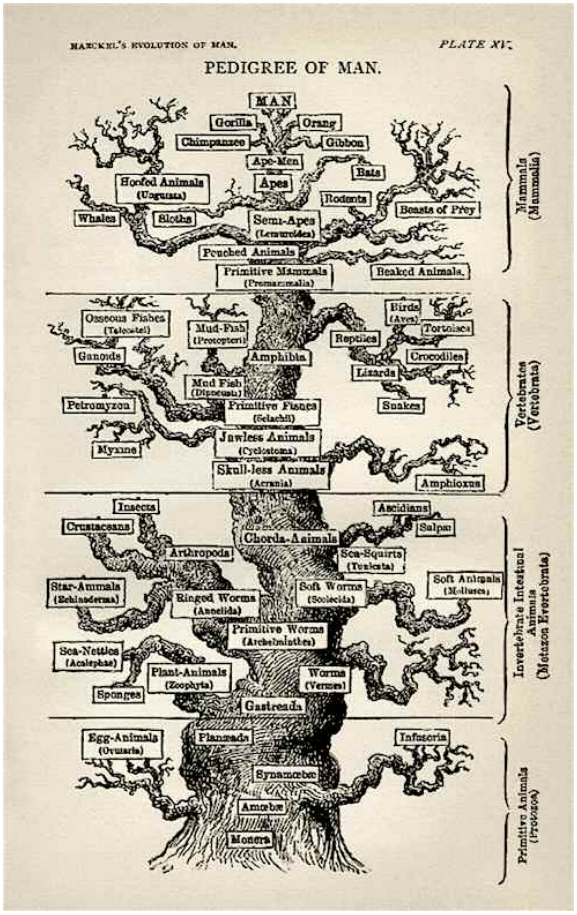

FIGURE 1 ~ *Haeckel's Tree of Life.*

In the wake of the Meselson-Stahl experiment, Crick published a hypothesis defining the flow of information in biology along a unidirectional path from DNA▷RNA▷protein, a chain of command predicated on DNA's autonomous, self-controlling mechanism[6]. Crick's hypothesis led to the belief that genes are self-actualizing, i.e. they turn themselves on and off and thereby represent the sole control of the hereditary characters that shape an organism. This notion of genetic control implied that people had no influence over their genetic fates but instead is "victims" of their heredity. For example, a history of a recurrent pathology in the family lineage, such as cancer, heart disease, or Alzheimer's, implied that children in that family would possess the disease-causing genes and should expect to experience the same fate as their parents.

Crick's theory also emphasized that an accidental alteration in the genetic code, introduced through copying errors in the process of DNA replication, is the initiating factor for evolution. Crick's hypothesis, which he referred to as *The Central Dogma*, became the foundational principle that shaped the next 50 years of biomedical research. It's a disturbing principle because the *Dogma* emphasized that evolution

is independent of environmental circumstances. The emphasis on DNA's primacy in controlling life led to the Human Genome Project, an effort to identify all the trait-controlling genes found in the human genome. Armed with such knowledge, it was thought that genetic engineering would enable humans to control their fate, as well as offer science the ability to create "new" organisms, in what would amount to human-designed evolution.

But by the time the Human Genome Project got off the ground in 1990, research was undermining the conclusions of Crick's *Central Dogma*, which, after all, was only a theory he introduced to the public around 1960, though the premise was repeated so frequently over decades that people forgot it was only a hypothesis and assumed it was scientific "truth."

1 - The Dogma's unidirectional flow of information was upended by Harold Temin's Nobel Prize-winning research on reverse transcriptase, the enzyme infamous for its role in the propagation of the AIDS virus[7]. Temin's research changed the Dogma's information flow by showing that RNA can alter the information coded in DNA: DNAÛRNAÞprotein. Temin's research was included in Crick's formal journal article in 1970[6].

2 - Cell replication research that factored in the role of the formerly discarded chromosomal proteins also changed the understanding of information flow in biology. This research found that DNA does not control its own activity, but is dependent upon the activity of chromosomal proteins that are controlled by environmental signals. As succinctly stated by Nijhout in 1990, "When a gene product (i.e., protein) is needed, a signal from its environment, not an emergent property of the gene itself, activates[7] expression of that gene"[8].

The *Dogma's* latest information flow chart reads as: DNAÛRNAÛprotein.

Then came the 2003 results of the Human Genome Project, which further eroded belief in Crick's Dogma. Science had held that the evolutionary lineage illustrated in the Tree of Life represented a hierarchy of species with ever increasing genetic complexity. Simple organisms near the base of the Tree would possess a small number of genes, and as one ascended the Tree, more advanced organisms would have greater numbers of genes to accommodate their more complex structural and behavioural traits.

Based on the belief that every protein required a gene blueprint for its synthesis, scientists estimated that the human genome would have a minimum of over a 100,000 genes. But the project found instead that despite humans' lofty position on the Tree, the human genome contains only ~20,000 genes[9]. That result upended the fundamental tenet of modern genetics that one gene codes for one protein. But there was more. It turned out that the miniature roundworm, *Caenorhabditis elegans*, an organism at the bottom of the Tree comprised of only 1,031 cells, has the same number of genes as humans at the top of the Tree comprised of 50 trillion cells, which led to the project's most profound insight: evolutionary lineage does not reflect increased genetic complexity.

These new insights profoundly revised the foundation of genetics and led to the formalization of a new field of heredity research, *Epigenetics*. In contrast to the conventional belief of genetic control (i.e., "control by genes"), the prefix "epi" in the term epigenetic control, simply translates as, "control *above* the genes." It is now recognized that the environment, and especially our perception of the environment, provides the source of "control" above the genes and represents the primary factor that shapes genetic activity. Epigenetic mechanisms can create thousands of different variations of proteins from a single gene blueprint[10].

The new emphasis on the role of the environment in controlling heredity resurrected Jean Baptiste Lamarck's once ridiculed theory of evolution. Published fifty years before Darwin's *Origin of Species* in 1809, Lamarck's theory of evolution scored the hierarchy of species in the lineage on the basis of their level of consciousness rather than their level of genetic complexity[11]. Unfortunately, the definition of the term "consciousness," has itself been a source of problems — some definitions of consciousness are philosophically based and take pages to define. At the simplest level of understanding, consciousness can be described as the state of "being awake and aware of one's surroundings." Using this definition, more than two centuries after Lamarck, Margulis successfully argued that primitive single-celled organisms, from bacteria (prokaryotes) to amoebas (eukaryotes), clearly possess a primitive level of consciousness[12].

Still, efforts to assess the nature of consciousness and the nervous system's role in evolution have been thwarted by the unimaginable complexity of the connectivity and information flow in the brains of higher organisms, which can contain a trillion or more cells. Recent research has focused on a lower organism, the microscopic brain of *Caenorhabditis*. Histological studies of this worm's brain have provided a complete "connectome," a map revealing all the connections among the brain's 302 cells. Despite this mapping information, the complexity of the information flow has made it impossible to decipher how the brain creates the character of "consciousness," and specifically, how that consciousness would influence evolution.

A different approach to understanding the role of the nervous system is to study single-celled organisms, such as amoeba. Protozoan eukaryotic (nucleus-containing) cells have the same physiologic systems found in human beings that control respiration, digestion, excretion, musculoskeleton, endocrine and immune functions, and most important for this story, a nervous system[13]. In the single-celled species, cytoplasmic miniature organs ("organelles") provide the same physiologic functions that in humans are provided by the complex organs. As to the question of which of these organelles serves as the "brain" of single-celled species, current biological curricula still point to the nucleus. But that "fact" has been challenged by enucleation research, in which micropipettes are used to remove the cell's gene-containing nucleus. Though these cells have virtually no DNA, they can survive for weeks and still exhibit complex behaviours. The only function lost in enucleated cells is the ability to reproduce their proteins and even the cells themselves. This research suggests that the nucleus is not the "brain" of the cell, but in reality, represents the cell's "gonad."

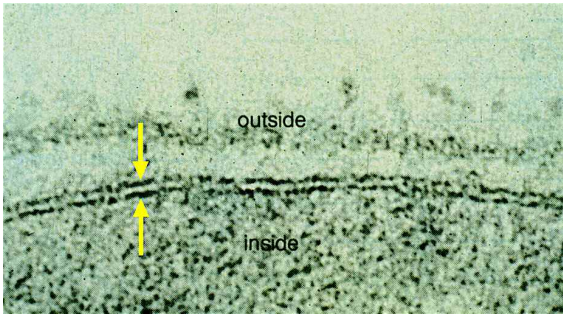

FIGURE 2 - *Electron microscopic image of cell membrane (between arrows), cytoplasm is below the membrane.*

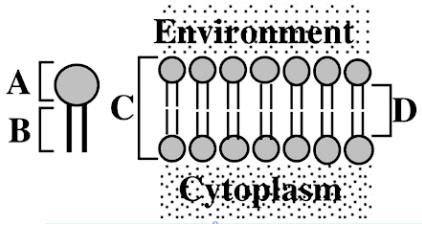

FIGURE 3 - *Molecular model of crystalline phospholipid bilayer forming cell membrane.*

My research on cloned stem cells during the late 1960s and early 70s also provided insight into the nature of the cell's brain[14]. This research involved inoculating a culture dish with a single multipotential stem cell. Cultured stem cells divide every 10 to 12 hours; one week after plating a single stem cell, the culture contains approximately 24,000 cells. All the cells in the culture dish are genetically identical because they are progeny of a single parent cell. I split up the cell population into three dishes, each with different culture mediums, i.e. each with a different environment. In environment A, the cells formed muscle. In environment B, the cells formed bone and in the third environment C, the cells formed fat cells. Because all the cells were genetically identical, the results revealed that the fate of cells is controlled by their response to the environment and not by their genes. These original observations illuminated the role of epigenetics 20 years before this field of knowledge was officially recognized.

The results of these cell culture experiments as well as enucleation experiments, shifted attention to identifying the cellular equivalent of the human nervous system responsible for translating environmental signals into cell behaviour. That search led to the bacterial cell membrane, the cell's only structured organelle. With a thickness of 10 nanometers, the physical dimension of the cell membrane is well below the resolution of the light microscope. In fact, scientists only learned that all cells possess a cell membrane when the electron microscope was invented in the late 1940s. In electron micrographs, the cell membrane appears as a vanishingly thin (<10nm), tri-layered (black-white-black) "skin" enveloping the cell (FIGURE 2).

A general rule in biology is that structure implies function; simple structures have simple functions and complex structures express complex functions. But cell membranes are the exception to that rule. While simple in structure, the cell membrane, which was the first biological organelle to evolve, is far from simple in function. Membranes provide a physical barrier separating the interior cytoplasmic domain from the external environment, but they are also responsible for respiration, digestion, and excretion functions, and serve as each cell's "nervous system" because of their ability to "read" external environmental conditions and then relay regulatory signals internally to control cytoplasmic behaviour.

As for the structure of the membrane, its layered appearance in the electron microscope directly reflects the molecular organization of its phospholipid building blocks. Lollipop-shaped phospholipid molecules are amphipathic, possessing both a globular polar phosphate head (FIGURE 3a) and two stick-like non-polar legs (FIGURE 3b). When shaken in solution, phospholipid molecules self-assemble into a stabilizing crystalline bilayer (FIGURE 3c). The illustrated membrane model clearly reveals the reason for the dark-light-dark layering observed in the microscope.

The molecule's lipid legs, forming the membrane's central core, provide a hydrophobic barrier (FIGURE 3d) that physically partitions the cytoplasm from the external environment. While cytoplasmic integrity is maintained by the lipid's passive barrier function, life processes necessitate the active exchange of metabolites and information between the cell's cytoplasm and surrounding environment. A membrane comprised of only phospholipids would not support the transport activities required to sustain life.

Enter the crucial cell membrane's large population of proteins (100,000+) that are unseen in electron microscope images. Because these proteins are physically integrated within the membrane's structure, they are referred to as integral membrane proteins (IMPs). There are two fundamental roles attributed to all cellular proteins.

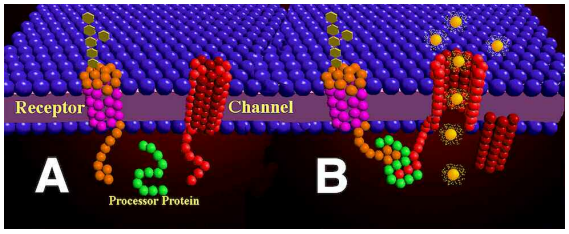

FIGURE 4 ~ *Receptor-Effector IMP switch in membrane. (A) Inactive "switch" on left signal; (B) after signal coupling, activation leads to conformational changes which couple receptor with channel. The channel protein's wall is cut open to reveal signal ions transiting pore.*

1 ~ They provide for the cell's physical structure (anatomy).

2 ~ They are responsible for generating the cell's vital physiologic functions.

To understand how membrane proteins perform those roles, it is necessary to consider their shape-shifting structure. Each protein's unique 3-dimensional structure is defined by its "backbone," a linear molecule comprised of a specific sequence of amino acid molecules strung together like beads on a string. After the amino acid backbone is assembled during protein synthesis, it spontaneously folds into a specific three-dimensional conformation (shape) by balancing the electrical charges within its amino acid backbone. A protein molecule responds to an environmental signal, such as an ion, a molecule, or resonant vibrational field by shifting into a complementary physical shape. The binding of an environmental signal to a protein, alters the distribution of electric charges along the protein's backbone. In response, the protein's shape is reconfigured as its backbone adjusts by folding to accommodate the altered electrical charges. Simply, when a protein binds with a complementary environmental signal, it causes the protein to shift from conformation A to conformation B. The movement generated by protein conformational changes is harnessed by the cell to power its physiologic behaviours.

Membrane IMPs can be functionally subdivided into two major populations: receptors and effectors. Receptor proteins are molecular "antennas" that recognize environmental signals; effector proteins are output devices whose function is to regulate cellular processes (FIGURE 4). Membranes have thousands of different types of receptors, each responding to a specific environmental signal. Bonding with an environmental signal induces a change in the receptor protein's shape from its resting (inactive) conformation to an "activated" conformation. The activated receptor conformation enables it to bond with either a specific function-producing effector protein or with an intermediary processor protein. Receptor proteins return to their "inactive" conformation and detach from effector proteins when the prevailing signal ceases. Like receptors, effector proteins generally display at least two conformations: an active configuration in which the protein expresses its function and a "resting" conformation in which the protein is inactive. These observations reveal the cell membrane to be an organic information processor whose receptor-effector IMP complexes are molecular "switches" connecting specific environmental stimuli with specific behavioural responses.

The membrane's information processor function becomes more evident when defining its structural and functional characteristics. First, the molecular order of the phospholipids in the membrane defines it as a crystal. More specifically, the membrane's flexibility reveals that its lipid bilayer is actually a liquid crystal. The membrane is an impermeable barrier because its hydrophobic lipid core prevents the trans-membrane flow of water-soluble ions and molecules, which gives it the character of a nonconductor. A significant modification in the membrane's definition is provided when IMP functions are taken into consideration. Receptor proteins relay specific environmental signals to engage specific outputs, which makes the term "gate" the perfect synonym for receptor functioning. Effector IMP s, specifically channel proteins, provide selective permeability across the membrane's lipid barrier. A membrane made of only phospholipids would be a nonconductor, but the introduction of protein channels gives it the property of being a conductor. In consideration of the selective nature of what channels transport, the membrane is actually a

semiconductor. When factoring in the membrane's structural and functional characteristics, the definition reads: *The membrane is a liquid crystal, semi-conductor with gates and channels.*

The exact same terminology defines the character of a silicon computer chip, though it is of profound importance to emphasize this is not a coincidence because the cell membrane is a homologue, not an analogue, of a computer chip. The functional components that contribute to the information processing behavior in a silicon chip have their exact counterparts in the carbon-based cell membrane. Cornell and others verified the cell membrane behaved as a biological "chip" in studies of cell membranes bound to gold foil electrodes. By monitoring the flow of electrolytes between the membrane and the foil substrate, researchers were able to record a digit readout of the opening and closing of the membrane's receptor-activated ion channels[15].

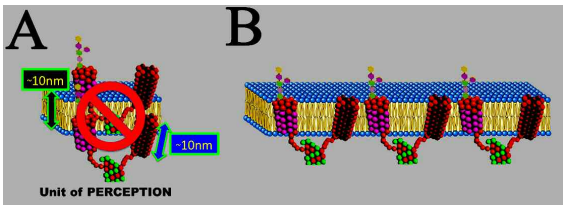

FIGURE 5 - *In (A), size restrictions prevent receptor-effector proteins from stacking upon one another. In (B), new perception units can only be added laterally, forming a monolayer.*

The complex functions of the cell membrane described above demolish an old belief, and for far too many, a currently held belief, that gene "programs" in the nucleus represent read-only memory (ROM), a belief predicated on the information flow described in *The Central Dogma*, DNAÞRNAÞprotein. Crick's *Central Dogma* gave rise to the concept of genetic determinism, the belief that our fate is preprogrammed in our genomes. Since the human body represents the protein in Crick's information flow, it was assumed that we are powerless in influencing our genes. Hence the presumption we are "victims" of our heredity. As is evident from studies on membranes in single-celled species, the character of human consciousness did not arise intact out of thin air. Instead, it evolved as a gradient of expression ranging from the primitive awareness of a bacterium to the self-consciousness of Albert Einstein.

In fact, the level of consciousness expressed by an organism can be directly attributed to the number of receptor-effector switches (units of perception) its membrane possesses. In recognition of the membrane's homology with a computer, receptor proteins function as Inputs (I), while effector proteins are Output (O) devices. Defined as an I/O makes a receptor-effector complex technically a BIT of data. As with any information processor, the membrane's processing power is scored by the number of BITs it handles.

Consequently, the processing power expressed in terms of an organism's consciousness can be mathematically quantified by calculating the number of perception proteins (BITs) it possesses. The thickness of the cell membrane is fixed at ~10 nanometers due to the dimensions of the phospholipid molecules comprising the bilayer. Because of the structural limitations imposed by the lipid bilayer's dimension, IMPs cannot be stacked – they can only be deployed as a monolayer.

These structural limitations have far-reaching consequences. The population of consciousness-providing perception units (BITs) is directly proportional to membrane surface area, consequently the evolution of consciousness can be mathematically modeled by mapping an organism's membrane surface area[16]. Modelling membrane evolution necessitates the use of fractal geometry, since the repetitive branching-within-branching structure of a fractal represents the best way to get the most surface area within a three-dimensional space[17]. The fractal character of the membrane's geometry facilitates an understanding of evolution of consciousness because fractal structures are built from iterated, self-similar patterns present at every level of the organization.

The external rigid capsule of the primal prokaryote cells represented a structural parameter that imposed limits on the physical amount of membrane surface area that can be contained within a single cell. After the appearance of primitive bacteria-like prokaryote cells 4 billion years ago, Phase 1 of evolution focused on making the "smartest" cell by maximizing the prokaryote's membrane surface area and IMP population. Once the prokaryote acquired its full complement of membranes, evolution stopped. Subsequent advancement in evolution employed a different paradigm. In phase 2, rather than focusing on enhancing the consciousness of the individual cell, evolution advanced by assembling individual cells together to form community. Communal organizations contributed two additional survival advantages over the evolution of the single cell.

1 - Enhanced Awareness: An organism's survival is based upon its level of awareness, which is directly proportional to its membrane surface area. Evolution's Phase 1 maximized the information-handling

awareness of the individual cell. Once completed, the only way it could acquire more awareness was to couple with other cells in community and share awareness. Community provides more "eyes" to see the world.

2 - Increased Efficiency: The division of labour among cells in a community offered an additional survival advantage. Consider the old adage, "Two can live as cheaply as one."

To survive, each cell is required to expend a certain amount of energy. The amount of energy conserved by individuals living in a community contributes to both an increased survival advantage and a better quality of life. Initially, bacterial cells lived in widely dispersed communities, wherein individual cells were physically scattered throughout the environment. Over time, heterogeneous groups of bacteria assembled into physically close-knit communities. To protect themselves from the ravages of harsh and extreme environments, these prokaryote communities secreted polymers aka biofilms that provided a protective, yet permeable membrane-like barrier. The earliest biofilm fossils are dated at 3.5 billion years old. Their evolutionary success is illustrated by the fact that they currently represent more than half of the earth's biomass. The first communities on the planet are still the most dominant communal organization on Earth[18]. Many biologists believe that the transformation of primitive biofilm communities into single-celled eukaryotes, just over 2 billion years ago, represented one of the most significant events in the history of life on Earth.

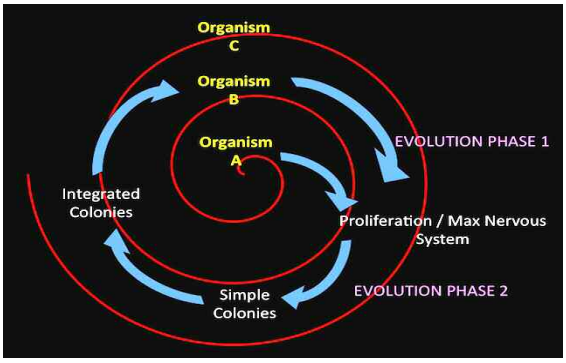

FIGURE 6 - *Spiral progression of evolution is cyclic. In the first cycle, a new organism A, once formed, enters Phase 1 through which the development of its nervous system becomes fully maxed out. When complete, evolution switches to Phase 2 wherein individuals assemble to create community. Phase 2 of the cycle ends when, highly structured, efficient colonies can transform into a new organism, Organism B. The next cycle begins when the evolved organism B uses the Phase 1 paradigm to maximizes its awareness. Currently, life is in nearing the end of the third cycle that was initiated when primates evolve as Organism C.*

While the evolutionary success of biofilms is a testament to the enhanced survival value of sharing awareness, the benefits of communal living come at the high cost of supplying the energetic needs to support the livelihood of 10 thousand or more communal cells. Evolution resolved those high maintenance costs by transforming the multicellular community into a eukaryote (nucleus-containing) cell, a new form of life form. This observation led to the fascinating question of how it happened, i.e., "How did the genetic traits derived from a multitude of prokaryote precursors end up in a single cell?"

Margulis theorized that larger, more advanced eukaryote (nucleus-containing) cells were derived from microbial colonies and that symbiosis, which is the assembly of individuals based on mutually beneficial relationships, was the major drive force behind evolution[19]. Recent genome research reveals that genes can be *shared* among members of different species via a mechanism referred to as gene transfer[20]. This is Nature's method of enhancing the survival of the communal biosphere because organisms can rapidly acquire behavioural programs and traits from other organisms.

The gene transfer process also enabled vital gene programs from individual cells comprising the biofilm to be collectively localized within a single membranous repository, the precursor of the cell nucleus. Centralizing the gene programs precluded the need to maintain a massive prokaryote population within the film. Eventually, eukaryotic physiologic functions, derived from the behaviours of former communal microbial cells, were taken over by specialized, non-living cytoplasmic organelles.

Thus the origin of eukaryotes as a "new" organism initiated a new cycle of Phase 1 and Phase 2 evolution. With the development of a supporting internal cytoskeleton, eukaryote cells were able to significantly increase their size (50 to 100 microns in diameter) over that of prokaryotes (0.5 to 2 microns in diameter) in Phase 1 of their evolution. Physical imitations on the size of eukaryote cells restricted further expansion of the information processing membrane surface area. If a eukaryote cell grew too large, the pressure exerted by its cytoplasmic mass would rupture the membrane and lead to cell death. As a result, after a billion years of evolution, eukaryote cell development also reached an endpoint where structural limitations prevented the incorporation of

more membrane surface area. Upon creating the Earth's most conscious organism, Phase 1 of eukaryote evolution ended.

Phase 2 of eukaryotic evolution began around 600 million years ago when eukaryote cells began to assemble into simple communities to share awareness and improve their survival. Participating eukaryote cells comprising these primitive colonies were structurally and functionally identical and display the same behavioural characteristics. As the population density of cells in these colonies grew, it was no longer efficient for all participating cells to engage in the same behaviours. The process of cell differentiation evolved to efficiently support the physiologic needs of large cellular communities.

Differentiation mechanisms enabled individual communal cells to express up to 200 different specialized functions, such as brain cells, skin cells, and heart cells in animals and xylem, phloem and cambium cells in plants. Vital physiologic systems that support the lives of individual eukaryote cells are the exact same systems needed to support the survival of the eukaryote communities that represent plants and animals. Collectively, the specialized behaviours of differentiated cells provide the community with the same vital functions required by a single cell.

All of the physiologic systems in a eukaryotic cell are replicated in plants and animals by mosaics of differentiated cells. With the exception of unicellular species, each plant and animal species comprising the web of life is actually a complexly organized, multicellular eukaryote community, distinguishable by its unique shape and behaviours.

The basic structure and functions of the eukaryote cell membrane are reproduced in multicellular animals as an epithelium. This is a multicellular tissue comprised of membrane-like layers of cells that cover external surfaces and line internal surfaces of hollow organs, such as the digestive, respiratory and urogenital tracts and blood vessels. The brain in vertebrate organisms evolves as a derivative of a specialized embryonic neural epithelium encased in the rigid skull.

Mammals are the most advanced species in the lineage of multicellular eukaryotic vertebrates. In mammals, the barrier and information processing functions of the eukaryote's cell membrane are replicated in the structure and behaviour of the embryonic ectoderm, the epithelial equivalent of a cell membrane. The ectoderm provides for two specializations in mammals, skin and nervous system, the same functions provided by the eukaryote's cell membrane. The brain in primitive mammals resembles a smooth rounded vesicle within the skull. Tracing the lineage of mammal evolution, the increase in conscious processing mechanisms is expressed as an expansion of the brain's neuroepithelial ("membrane") surface area. In accommodating physical limitations imposed by rigid skulls, the expanding neuroepithelium folds back upon itself producing the brain's characteristic folds and furrows, referred to as sulci and gyri.

Over two million years ago, a community of amoeba-like cells that formed the body of an orang-utan evolved into two new organisms, chimpanzees and primates. In a replay of evolution's Phase 1, the new primate organism underwent two million years of evolution to create the most conscious single primate. Around 150,000 years ago, the primate lineage led to the evolution of *Homo sapiens*, "wise man," and up to now, the most conscious version of a primate. Phase 1 of human evolution ended when the rigid human skull could no longer accommodate more brain surface area.

Once human beings evolved as the most conscious version of primates, the mechanism promoting further human evolution was derived from the pattern observed in Phase 2; individual humans assembled into multi-human communities to share awareness and collectively evolve consciousness. Small hunter-gatherer clans grew over time into larger communities as humans maximized the evolution potential of the mammalian lineage. In Phase 2, the evolution of human communities transitioned from families, to clans, to states and to nations.

Around 50 thousand years ago, the collective consciousness of the human community reached a critical threshold that brought forth the emergence of early technologies. In civilization's early days, the time between the appearances of new technologies was measured in periods of years. Now, the density of the human population and its collective consciousness is so great that the period between technology innovations is now measured in units of days.

Today's world crises are precipitating a major evolutionary upheaval that will profoundly alter the fate of human civilization. The chaos produced by global crises, which are symptoms of our unsustainability, is destabilizing the structure of civilization and its institutions. While the current system is collapsing, new insights, understanding, and visions offered by cultural creatives from every field of human endeavour, are pointing the ways to reorganize human civilization so we may thrive into the future. The theory of conscious evolution offered by Lamarck provides the blue print for a more enlightened future, as does our new understanding of cell evolution.

Analysis of the development of the cell membrane as the primal nervous system has revealed, as outlined above, a heretofore-unobserved repetitive pattern of evolution with two phases (FIGURE 7): Phase 1, starts with the origin of a new organism and proceeds to create the most conscious version of that organism. Phase 1 ends when physical limitations prevent further enhancement of that organism's nervous system. Phase 2 advances evolution by increasing consciousness through the assembly of individual organisms into cooperative information-sharing communities. This phase ends when the most conscious communal organization transforms into a new organism. The presence of a new organism initiates the repeat of another cycle of Phase 1 and Phase 2 that results in the expression of yet a higher level of evolution.

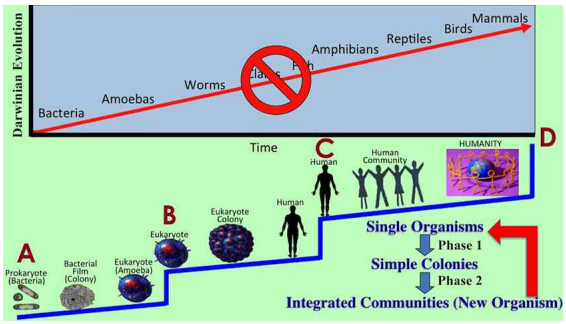

FIGURE 7~ *The top image shows the former scheme of Darwinian evolution as a slow linear progression. This theory has been profoundly challenged by the new science of epigenetics and the results of the Human Genome Project. The two Phases of evolution are illustrated in the lower right corner of this figure. The 3 cycles of progressions described above: 1) prokaryote to eukaryote; 2) eukaryote to human being, and 3) Human being to humanity. Civilization is currently approaching completion of its evolution into the new superorganism, humanity.*

We can get to that higher level of evolution offered in Phase 2, but only if we change our rapacious ways. The *potential* positive future our species can be likened to the metamorphosis of a butterfly. A caterpillar's body is comprised of several billion cells. In the body of the growing caterpillar, the economy is booming and the cellular community is actively employed. The voracious appetite of this organism leads to their devouring the leaves of the plant on which they are living. Caterpillar growth slows and eventually comes to an end as the available resources are consumed. Within the pupa, the cells are out of work and their highly structured community begins to fall apart. Specialized imaginal cells (the equivalent of "cultural creatives") within the ensuing chaos provide organizing information and direction to create a different, more sustainable future. Metamorphosis is complete when the non-sustainable caterpillar civilization transforms into the ecologically sensitive butterfly civilization.

The parallels are clear. By behaving as a caterpillar, human civilization's voracious appetite to grow and consume has undermined the environment and precipitated the 6th mass extinction of life. The global crises we face today are Nature's wake-up call for humans to realize that civilization needs to undergo a "metamorphosis," – the current environmentally destructive "caterpillar" version of civilization must transform into a "new" sustainable superorganism, *Humanity*. The looming fall of civilization as we know it is a necessity; we simply cannot build a future for humans to thrive on the unsustainable foundation supporting today's world. But we must keep in mind, not all caterpillars survive the metamorphosis into butterflies.

Will human civilization survive its "metamorphosis?" At the moment, civilization is balanced on the knife-edge of extinction or conscious evolution. Our uncertain future is dependent on the actions we engage in today.

♦

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ABSTRACTS :: SUMMARIES

DRAMATIS PERSONÆ

TOM ATLEE ~ ROSA ZUBIZARRETA

THE EMBODIMENT OF WHOLENESS IN OUR SOCIAL ORDER: OUR EVOLUTIONARY CHALLENGE AS HUMANS

Many spiritual traditions consider enlightenment as the individual realization of non-separation, which is then embodied in one's way of life: "after Enlightenment, the laundry". While a simple ox-herder may return to a life of ox-herding with a new consciousness yet little change in external appearance, we would not expect a mass murderer such as Angulimala to return to their previous life, but instead take up a transformed one. What would it mean for us as a species, to collectively realize "non-separation"? The focus of our attention here is collective enlightenment as the capacity of humans to collectively perceive and respond to the complex ecological and social realities we are immersed in and participating in, and to consciously behave in ways that align with those realities and serve the sustainable vibrancy of humanity and the rest of nature. Just as glimpses of the experience of individual enlightenment sustain and inspire our developmental journeys, glimpses that prefigure collective enlightenment nurture and inspire our next steps, as we expand to meet current evolutionary challenges. The Wise Democracy Pattern Language has been created with the intention of serving this purpose, and we have found "Using Diversity and Disturbance Creatively" to be one of its key patterns. ∞ [45-55].

RICHARD BARRETT

THE EGO-SOUL DYNAMICS OF ENLIGHTENMENT

This paper suggests that we make progress towards enlightenment as we learn to master the seven stages of psychological development. The first three stages of development are about the development of the ego. The fourth stage involves aligning the motivations of the ego with the motivations of the soul. The last three stages are about the activation of the soul. We achieve enlightenment to the extent we are able to master every stage of development – the first four stages being a necessary foundation for the upper three stages. ∞ [69-74].

MICHEL BAUWENS ~ EDWARD BERGE

COLLECTIVE ENLIGHTENMENT THROUGH POSTMETAPHYSICAL EYES

Enlightenment has had broadly different definitions is the East and West. In the East it is seen as an individual accessing meditative states that transcend the world of form in a metaphysical reality. In the West it is more about individual development to abstract reasoning, which can accurately represent empirical reality but is itself an a priori, metaphysical capacity. Enlightenment in either case is based on metaphysical individual achievements. However the postmetaphysical turn has questioned such premises, instead contextualizing both meditative states and abstract reasoning within broader socio-cultural contexts. Enlightenment itself has thereby been redefined within this orientation and is seen more as a collective endeavour that is collaboratively enacted. ∞ [85-92].

DEEPAK CHOPRA

A CRITICAL ISSUE: WHAT TO DO WHEN DARKNESS RISES?

Gazing at the sky for Collective Enlightenment, humankind sees the darkness in duality as a contrast to the light, as the dark side of its individuality, and as well as a new beginning. Our mind needs duality for the general understanding and for the feeling of evolution, but can this duality be of practical use for us? The plan of evolution of consciousness is to have no plan, but to get involved in a process starting at the individual level and moving up to the collective one, called, more appropriately, the whole. What exactly needs humankind: evolution or enlightenment? Let's see the darkness evolving and dynamically raising to the light, let see it as a beginning. The darkness and the light are knowledge, are one. ∞ [43-44].

ALLAN COMBS

COLLECTIVE ENLIGHTENMENT

The phrase Collective Enlightenment presents itself ripe with possibilities, but on closer examination it is hard to pin it down. An open search on Google, for example, brings up almost nothing. Indeed, the word "enlightenment" is itself without clear definition. In truth it has no direct counterpart in traditional spiritual texts, and is a transplant from the phrase "European Enlightenment," referring to the Age of Reason.

If Collective Enlightenment is taken in a societal sense it becomes a sociological term that has little in common with spiritual notions. The present essay, however, sticks to the modern use of "enlightenment" as pointing to spiritual ideas such as realization, awakening, or illumination. It is in these ways that it often replaces traditional terms such as samadhi, nirvana, and moksha in Western translations of traditional Eastern texts. Considering these as experiential states, we come to understand collective enlightenment as a shared or intersubjective experience in which individuality becomes phenomenologically second to a primary intersubjective reality that absorbs the ego into identity with the combined subjectivities of other living beings in a larger experience of unification.

Though this form of experience, which we might label illuminated intersubjectivity or Collective Enlightenment, has received little attention in the literatures of religion and philosophy, it has often appeared implicitly in art and poetry, and has been described in philosophical works of

science fiction. It seems the latter has often been the first to explore topics involving extreme human potential and dramatically altered forms of consciousness. The present essay examines these ideas, suggesting directions for the future evolution of human consciousness. ∞ [63-67].

DUANE ELGIN

HUMANITY'S JOURNEY HOME: WE ARE LEARNING TO LIVE IN A LIVING UNIVERSE

The present human crisis of identity, and the growing inquiry into existence and in the origin of the universe, are calling for Knowledge aligned with the shift of consciousness pulling us up, a call echoed in Plato's words "The universe is a single living creature that contains all living creatures within it". An invite to start knowing the universe and our role in it that will open our door to the future. The last hundred years materialistic interpretation offered by science drastically changed our knowledge, behaviour, relations and interactions between us, with nature, the planet, and God, falsely imposing on humankind a sense of individuality, and a society immersed in a non-living universe. Only since recent decades, the scientific view on the nature of the universe is aligning with the major spiritual traditions in which the Universe is perceived as a highly dynamic living organism in permanent renewal, full of creative energy and with an immense power. Sociological findings confirm that nowadays population believes in a divine power that gives life to matter; and that people are experiencing a sort of 'mystic' connection with the universe. The awakening of such feelings of unity is a step to enlightenment. The evolution is transforming the sudden occasional "wake ups" of unity with the cosmos into a deep need of permanent connection, and experiencing the aliveness of the universe will transform our isolation into an intimate communion. The urgent call for the protection of the Earth and its resources demands us to operate as a single economic, ecologic and social integrated system. A sustainable life is an issue of sustainable consciousness leading to a sustainable future. ∞ [5-13].

GEOFF FITCH

TRUTHFULNESS AND COLLECTIVE ENLIGHTENMENT

This paper examines the essential practice of Truthfulness and its role in supporting collective enlightenment, drawing on over 12 years of experience exploring, facilitating, and researching transformative change in an integral, developmental context. Truthfulness is distinguished as a complex and rich injunction, which extends beyond authenticity in relationship to individual and collective life grounded in a humble commitment to the truth. Truth in this context is a complex distinction that includes objective, subjective, and inter-subjective integrity and is developmentally grounded. A commitment to the truth, plays an essential role in Collective Enlightenment. As an inquiry, it places us in a continuous confrontation with the illusions and distortions that distract us from enlightened perspective. Inter-personally, it challenges us to drop our barriers with each other, which fosters compassion, understanding and collaboration. Socially, it prompts us to be responsible for the world we have created and engaged in right action, which is always an expression of the truth in the world and ourselves. Systemically, it opens the flow of energy and information, which allows systems to evolve. Being, and consequently, evolution, is grounded in the truth, or reality itself. We examine the implication of this understanding for practice. ∞ [159-163].

THOMAS HÜBL ~ JULIE JORDAN AVRITT

TOWARD THE INTEGRATION OF COLLECTIVE TRAUMA IN A TIME OF EXPONENTIAL CHANGE

Despite humanity's relative species success, we face a time of intense disruption and uncertainty. With exploding population growth, we must confront dire systemic concerns and increasing global complexity. Yet, with exponential growth in silicon chip-based technologies, our capacity to solve "wicked problems" may be more possible than ever.
But to begin to address our planet's gravest concerns in humane ways, we must confront human challenges, not just technological. The most crucial task of the post-modern age is not a question of artificial intelligence or continued space exploration; rather, it belongs to the inner domain. The evolutionary impulse of consciousness, alive in all persons, rises in a vertical line along each distinct genetic lineage, and equally across horizontal lines through interpersonal and cross-cultural bonds. This web of unbroken energy creates the matrix that is human consciousness. While our hyper-connected Internet-based tech may be evolution's answer to a collective brain, this matrix is the collective mind – and it carries both the light of individual and shared awareness, as well as the unconscious, or shadow of intrapersonal and collective traumas.
We will illustrate how powerfully cultural trauma is transmitted from one generation to the next, and why these burdens must be addressed and consciously integrated for the healing and wholeness of persons, communities, and cultures.Throughout our exploration, we examine ancient mystical principles, the energetic dialectic between stillness and movement and its relationship to sacred law, to a contemporary understanding of karma, and to the power of devotion and practice as channels for collective awakening. ∞ [75-83].

CHARLES JOHNSTON

BRINGING WISDOM TO THE FUTURE – CREATIVE SYSTEMS THEORY'S CONCEPT OF "CULTURAL MATURITY"

Creative Systems Theory proposes that our current point in culture's evolutionary story is not the ideal and end point we can assume. The theory describes a needed and increasingly possible further chapter, what it calls Cultural Maturity. We can think of Cultural Maturity as a kind of species "growing up." If the theory is right, our future human well-being – and perhaps our survival –

will depend on Cultural Maturity's needed next chapter in what it means to be human.

The concept of Cultural Maturity assists us in four essential ways. It helps us make sense of the easily confusing times in which we live. It provides a new guiding narrative as the cultural stories we have traditionally relied upon serve us less and less well. It helps us understand new skills and capacities that will be needed if we are to effectively address critical challenges before us. And it points toward needed changes not just in what we think, but how we think. Culturally mature perspective does more than just provide greater clarity. The cognitive changes it reflects make possible new, more dynamic and encompassing ways of understanding.

Cultural Maturity is a big-picture notion. We saw first hints of Cultural Maturity's changes over a hundred years ago and the concept should have pertinence well into the future. But it is also relevant to understanding current "front page news" social challenges. It describes the possibility of engaging concerns of all sort with a nuance and complexity – we could say simply wisdom – that has not before been an option. This paper introduces the concept and some of its implications. ∞ [165-174].

MARIYA K. KARAGYOZOVA

COLLECTIVE ENLIGHTENMENT. THE ASCENT

The subject of collective Enlightenment become very topical, modern and still lately not very well explored. The New Age moved the focus of the existential understanding and beliefs but kept it a bit eclectically spiritual. Humanity is facing the Age of the Aquarius, Kali Yuga, times when the frequencies of the universal energy are changing and transmuting. Existence is no longer an understanding of a physical process where the soul is coming down and up and God is empowering and authorizing it. The existence issue turns to be much subtler in order to reach another level of evolutionary understanding and actions required. The space-time continuum has different nuances now. The Human is no more a physical-soul structure only, it is a divine form thinking and acting accordingly. That divine nature of each of us is the Consciousness.

This article will follows the Consciousness from its genesis as revealed in the Vedas and as Siva whispered it to the Indian sage in the Siva Sutras, trough the evolution led by the Spanda principle, reaching back finally to the Universal source.

Light will be given to the aspects of individuality and universality of the Consciousness; also the understanding of individual and collective will change their places in the evolutionary process. The Consciousness will be seen as light, activity, knowledge, doership, will, awareness, Being, Becoming and freedom.

The Vedas and the texts of Kashmiri Saivism will give us the message of the subtle universal truth of the Consciousness, the law of the universality and the way to become again ONE. OM. ∞ [103-106].

ERVIN LÁSZLÓ

THE EVOLUTION OF OUR CONSCIOUSNESS IS THE ENLIGHTENMENT OF HUMANITY

In talking about consciousness, it naturally comes in our mind as one, since, given that it is an abstract idea, it cannot have a plural form; and because the individual experience of it is only an interpretation of our mind. Thus, being consciousness one, shared by all of us, there are just different levels of awareness experienced in the individual mind, which doesn't alter its wholeness. But how can the evolution of the individual level of awareness raise the level of the collective consciousness?

To study the evolution of consciousness, we first have to answer a few questions concerning our individual level of knowledge about it: is it a product of our mind, or is our mind a product of it? How does exactly operates at that individual level, and how are we experiencing it? And, if the reality that we live is a manifestation of the consciousness, how do we interact in that? Philosophy, science and spirituality are proposing alternative answers based on studies, observations and experiments. In modern consciousness research, the topic of the individual mind, the individually experienced consciousness, is called "the hard problem", because it joins two different concepts: that of our psycho-physical body, and that of the subtle, immaterial state of the consciousness. The research leads to a truth already known by ancient philosophy, to say, that our individual experience of the consciousness is just a reflection of it; that consciousness is not a product of our brain, or a mind construct; and that we are transmitters. More than this, we are transmitters of the collective consciousness, which creates us, and the world we are living in. The Eastern spiritual tradition presents the collective consciousness as the omnipresent and omnipotent Brahman, and the individual experience of it, as Atman, yet Atman and Brahman are but one, the dualistic concept being only for the sake of our binary understanding. Moving forward to the modern expression of the theory, we can see consciousness operating as a hologram. Evolution of consciousness has two aspects: the individual and the collective. Proved by the in-depth inquiry of the biologist Maturana, the evolved individual consciousness transforms people into a stable, peaceful and compassionate being, free of the materialistic limits and dedicated to the wellbeing of others, instruments for the good of a powerful, higher source. Therefore, having them as a living example, we can undertake our individual responsibility for the evolution of the collective consciousness starting today, within us. ∞ [1-3].

BRUCE H. LIPTON

AN INTRODUCTION TO CONSCIOUS EVOLUTION: A THEORY WE CAN THRIVE WITH

Today's global crises are symptoms of planetary upheaval propelled by the unsustainable desires of human civilization, which have precipitated the planet's sixth mass extinction event. The mechanisms driving evolution encode the characteristics that determine whether a species survives or becomes

extinct. Since the 1900s, neo-Darwinian theory, with its emphasis on the "survival of the fittest in the struggle for life" and on genetic mechanisms as the metric determining species survival, has shaped the behavioural character of civilization by giving scientific legitimacy to the use of power, greed and violence to "advance" civilization. However, new insights from epigenetic science and the results of the Human Genome Project have completely undermined basic tenets of Darwinian theory. Epigenetics recognizes that the environment, and more importantly, our perception of the environment, controls genetic activity and behaviour and thus shifts the focus of evolutionary theory to the role of the nervous system and consciousness. Because the structural and functional organization of the nervous system in multicellular organisms is so complex, single-celled organisms offer a more productive means for deciphering the mechanisms of consciousness. Conventional science considered the gene-containing nucleus as the cell's "brain," but new research points to the membrane as the information processor that controls the fate of the cell. Molecular switches built into the membrane translate environmental information into cell behaviour and represent the basic physical units of perception, the building blocks of consciousness. Modelling membrane evolution using fractal geometry offers profound insights into the origin and influence of consciousness and the role of cooperation within and among species. Because conscious evolution theory elucidates the fact that cooperation rather than competition and struggle is the driving force of evolution, it can support the survival of human civilization. ∞ [183-182].

JOANNA MACY

LEARNING TO SEE ON THE DARKNESS AMID CAASTROPHE

The Author dwells upon Gandhi's concept of Sarvodaya. "the universal uplift", and develops it along the interpretation of "to wake up together". We cannot wake up alone, as the process opens up the hearth to collective growth, care and love. The "media-corporations-banks" system consumes people and generates conflicts, fear and alienation. To be aware of this, gives raise to the recognition of our critical situation, leading to compassion. We are the evolving version of our ancestors and a chance for our evolving future. Freeing ourselves from the ego is central in the waking up process already running, yet the media keeps many away of the fact that our Sarvodaya has started, and that indeed we can be free in our living web. ∞ [IX-X].

FRED MATSER

MY PROCESS OF DE-VELOPING AWARENESS: FROM A FINITE UNDERSTANDING TOWARDS GLIMPSES OF INFINITY

Born in 1945, the author was raised in a family with an entrepreneurial attitude. Not challenged with deeper questions, he considered life as a given, finite in time and space, where to be conscious merely meant to use the brain to strive for success in life.

In 1986, he went through several transcendent experiences that opened the door into the presence of the realm of infinite consciousness and sheer unconditional love beyond time and space. There he started the journey to develop his consciousness, as he sought to know why we could not experience that presence in the daily chaotic world.
This article reflects his findings: how he realised that his consciousness, as with most of us, has been hijacked exclusively by the brain, rewarding the (male) mental faculty higher than it's twin (female) feelings faculty, both doorways to human consciousness. Valuing them equally delivers harmony in an individual, between people, and in their environment, a dynamic balance that unlocks the connection to infinite consciousness. ∞ [115-122].

ALFONSO MONTUORI

THE EVOLUTION OF CREATIVITY AND THE CREATIVITY OF EVOLUTION

Our understanding of creativity has undergone a remarkable change in the last 30 years. From an exceptional phenomenon confined to unusual, gifted individuals, there is now an increasing recognition of the creativity of interactions, groups, and communities. A further shift is occurring with a scientific worldview that sees the entire universe as a creative process. This article outlines the shift and explores the implications of universal creativity. ∞ [145-158].

ROGER D. NELSON

SHIFTING GLOBAL CONSCIOUSNESS TO GLOBAL AWARENESS

As the 21st century unfolds, it is clear that humanity needs to coalesce around goals of cooperation and mutual interest. Communication technology provides an avenue for connection, but in addition, we see evidence that a deep lying interconnection may also be present. This is largely unconscious and inaccessible to direct study, but may be seen in slight changes in random data generated continuously at multiple locations around the world. Parallel sequences of random numbers from physical sources based on quantum processes become slightly correlated during moments of widely shared meaningful emotion. Terrible tragedies as well as great celebrations bring us together and synchronize our thoughts and feelings, melding us into a shared consciousness. We become one in the sense that has been understood and described by the sages and seers of all cultures. The small but ultimately significant correlations in data from the Global Consciousness Project network may represent a subtle sign of the noosphere envisioned by Teilhard de Chardin in his description of the next phase of evolution in which humans would become a sheath of intelligence for the earth. ∞ [131-136].

TERRI O'FALLON

THE INTEGRATION OF AWARENESS WITH THE INDIVIDUAL AND THE COLLECTIVE

The collective has been a formidable force on individuals from the beginning of time. However, in our own identities we tend to rock back and forth between identifying with our

individual selves as primary and the collective as primary – the collectives that we sometimes experience as shaping us. When a tipping point of any collection of individuals foregrounds the individual, one kind of collective will show up. When a tipping point to any collection of individuals foregrounds the collective, another kind of collective shows up. Both individuals and collectives have a vertical developmental growth trajectory based on their capacity to see and embrace different worldviews, or perspectives.

In addition, the understanding of the maturing of Awareness as an individual experience or as a collective experience will also shape the individual and the collective. Mature awareness provides a horizontal limitless "ocean" within which both the individual and collectives arise, bringing wisdom to the growing up of our communities, which shape us as individuals even as we shape them. ∞ [57-62].

GEORGE PÓR

ON THE VERGE OF COLLECTIVE AWAKENING

We have been on a journey of expanding collective consciousness, from the early days of hunting for game and gathering berries for sustenance to the space-faring species that we may someday become... Before taking off for other celestial bodies, we still have something to do on this beautiful home planet: to discover who we really are and what our work is together.

We don't live in an era of changes, but as many have stated before me, in the change of eras. This period of shift in planetary paradigms was described as systemic bifurcation (Laszlo, 1991) or punctuated equilibrium (Eldredge & Gould, 1972), and also popularized as "jump time" (Houston, 2004). In this jump time, humankind's prehistory is slowly coming to an end. Will the new era bring collective enlightenment or collective endarkenment? Or perhaps both?

We only know where we have been, not where we are heading; no traveller has ever seen that land and returned with a roadmap to it. We also know that there's a widespread longing for "a more beautiful world our hearts know is possible." (Eisenstein, 2013).

And there's not only longing, but also a gradual awakening of the social body. The increasing Volatility, Uncertainty, Complexity and Ambiguity (also known as "VUCA" times) give cramps to its limbs and constrain its stretching. However, they also provide the perfect challenges for growing competences against. That's why we see a growing interest in memes like "collective intelligence," "wisdom society," "collective Buddha," "collective sentience," and "collective enlightenment" They are flying around on the internet, looking to increase their mindshare. If the learners inherit the Earth, as Hoffer said, we'd better pay attention to what we need to learn: that is everything that the next-stage world needs to know about itself. That begins with what collective awakening is and what it is demanding of us.

The essay you've just started reading is a seed document for a collaborative Action Inquiry (Torbert, 2014), shaped as Generative Action Research (GAR) into our collective awakening, its indicators, conditions and scales. It's an invitation that will introduce you to what is hindering and what is enabling the possibility of an awakened community, at four levels: person (micro), community (meso), organization (macro), and global systems (mundo).

Those four scales are nested contexts for wise collectivity. It is impossible to do justice to this huge subject in any depth, in one essay. Yet, I'm including them in order to offer a conceptual framework so that you can learn from the levels relative to your main interest.

I wish you a pleasant journey, and remember, collective awakening is a community art form; none of us can practice it alone. If you need a learning partner, let other readers know that, or invite someone to read along with you… ∞ [15-30].

ERIC REYNOLDS

NEXT STAGE ORGANIZATIONS

Collective evolution is the nature of the universe. From the Big Bang to Purple Rain, all of existence has emerged in an unceasing, cosmically inspired dance. Strange attractors exert an inexorable pull, as the gravity of destiny shapes the flow of creation. As early Helium and Hydrogen soon realized, there is no turning back. Free-will doesn't mean we can change the music, just that we decide how we wiggle and with whom we dance. And in the end, there is always an explosion.

Once again, the end of times is at hand. The question facing humanity today is whether to continue denying this, and go out in a blaze of glory, or step up to our cosmic potential. The collective stardust that is humanity has ushered in the Anthropocene, and we are now at the helm of spaceship earth. To survive in post-normal times, we must address the wicked problems of a Volatility, Uncertainty, Complexity and Ambiguity (VUCA) world at peak everything, where widespread social, economic and environmental injustice are colliding amidst the increasing pressures of catastrophic environmental damage and exponential human and technological growth. Next Stage Organizations can bridge the inherent paradox of these problems, tapping into the wicked transformative potential of conscious evolution by adding value where once was pain. ∞ [137-145].

JIM ROUGH

THE TOBE PROJECT. HOW TO FACILITATE ALL OF US TO COME TOGETHER AS WE THE PEOPLE

Collective enlightenment on a global scale is not a wish for some future time. It's essential now. Environmental destruction, wars, and poverty are just some of the global issues that only "We the People" – all of us perceiving and acting together – can fix.

There are social innovations that can be used to facilitate collective enlightenment in society. This essay describes some experiments with those innovations, the underlying theory for how they work, and our plan for facilitating a global "We the People" into being. Overall, the strategy is

simple. Imagine if we could somehow call "time out!" every couple of months where all the people of the world come together respectfully and creatively for just couple of hours. And during this time we facilitate them to work on these issues, co-create win/win solutions and cooperate as one powerful new entity, "We the People" to make the needed changes. Sound idealistic? It's not. ∞ [175-182].

PETER RUSSELL

BLIND SPOT: THE UNFORESEEN END OF ACCELERATING CHANGE

That humanity and the planet are in crisis is clear. Moreover, the severity of the crisis is now beginning to hit home. Recent reports suggest we are in the early stages of the sixth major mass extinction in Earth's history – this time caused by one of the planet's own species rather than an asteroid or comet impact – and if we do not change our ways radically and very fast, then we, along with many other species, will become extinct in a century or so. And it is our own fault.

At least that is the story we are told. Here I propose a new story of human evolution – not the kind of new story that many people are calling for in which personal and social transformation help us avoid immanent extinction and move on to a sustainable long-term future. In this radically different new story, there is no long-term stable future ahead of us. We are coming to the natural end of our species' journey, spinning faster and faster into the centre of an evolutionary spiral. However fast we find the pace of life today, one thing is sure, twenty years from now it is going to be much faster, and twenty years after that much faster still, and twenty years after that... almost unimaginable.

Some look at where this acceleration is taking us technologically; to the so-called singularity when computers surpass human intelligence. We would then move into a new era of development unlike anything we have seen so far. But whatever may transpire in a post-singularity world, one thing is certain: The acceleration in the rate of development will not stop. Quite the opposite; it will leap upwards even steeper.

Herein lies our blind spot on the future. Continued acceleration is inevitable, and is winding us up faster and faster in a whirlwind of change from which there is no way out. Yet any notion of a long-term future for humanity implies the acceleration has ceased. You cannot have it both ways.

In addition, accelerating change puts ever-increasing stress on the systems involved – human, social, economic, and planetary. Stress stems from failure to adapt. And failure to adapt leads ultimately to breakdown of these systems.

Many of the crises facing us have arisen from accelerating development. Climate change, for example, stems from the fact we are burning fossil fuels thousands of times faster than the plane can reabsorb the CO2 produced. And there are other equally dangerous crises waiting in the wings, each the failure o adapt to ever-increasing rates of change.

The new story is not, however, all one of doom and gloom. The impending end of our species in linear time does no preclude our fulfilling our destiny in exceptional times. Here could be as much as development in the decades remaining as there has been in he whole of human history so far. ∞ [31-42].

ZACHARY STEIN ~ MARC GAFNI

THE APOCALYPSE OF THE MODERN WORLD-SYSTEM & RELATED POSSIBILITIES FOR DEMOCRATIZING ENLIGHTENMENT

Two narratives about the nature of our current historical moment are brought together in the interest of provoking a reconsideration of "collective enlightenment," or what we term the democratization of enlightenment. World-systems analysis is a trans-disciplinary field focused on the evolution and future of the modern world. Leaders in this field have charted long-term limits and end games, placing our current era in the heart of the modern world-system's epochal and final crises. Esoteric religion and mystical traditions have also located our era at the heart of a world-transformation. From Teilhard de Chardin to Process Theology, a divinely inspired turning point in Earth's evolution has been argued to be immanent. The process of replacing the modern world-system involves the widespread democratization of enlightenment. Engaging in concrete utopian theorizing we suggest that tomorrow's world will involve certain widespread "social miracles" – making enlightenment an everyday thing. Drawing on mythic and biblical imagery, we suggest the apocalypse of the modern world-system will be accompanied by widespread transformations of collective consciousness – a Planetary Awakening of Unique Self Symphonies. ∞ [93-101].

JOHN E. STEWART

ENLIGHTENMENT AND THE EVOLUTION OF THE MATERIAL WORLD

What is the evolutionary significance of enlightenment? To what extent are capacities that are enabled by enlightenment essential to the evolutionary survival and flourishing of humanity into the future? This article argues that key capacities associated with enlightenment are of critical importance: they can significantly increase the ability of human individuals and societies to adapt and evolve. Two of these capacities are: i) self-evolution: the ability of an organism or organisation to free itself from the biological and cultural dictates of its evolutionary past so that it can choose to evolve in whatever directions are necessary to benefit its evolutionary future; and ii) meta-systemic wisdom: the capacity of an organism or organisation to develop mental models of interactions between itself and its complex environment and to use these models to identify actions that will serve its evolutionary future. The development of these two capacities is essential if the living processes that emerge on any planet are to participate successfully in the future evolution of life in the universe. Humanity is rapidly approaching circumstances that are demanding the development of these capacities individually and collectively. Fortunately, the world's religious and spiritual traditions possess much of

the knowledge and techniques needed to develop these abilities. ∞ [107-114].

GREGORY WILPERT

CONSCIOUSNESS FOR THE POST-CAPITALIST COMMONS: A DEVELOPMENTAL PSYCHOLOGICAL PERSPECTIVE

It is generally accepted that certain types of institutions function best when most of their members share a certain type of consciousness: a similar way of making sense of the world and of moral judgment. In short, capitalist consciousness works best for capitalist institutions, just as feudal consciousness works best for feudal institutions. If a commons-based society were to be the dominant institutional framework for a better future, then what kind of consciousness would be necessary for it to work? Research in developmental psychology provides us with powerful evidence as to what a post-capitalist consciousness might look like and how it would fit with a commons-based society. The work of some developmental psychologists describe the furthest reaches of consciousness development as being one that is capable of making sense of highly complex systems, as being principle-based (instead of rule-based) and as being flexible, globally empathetic, post-materialist, and capable of finding unity in diversity and diversity in unity. It is precisely these types of characteristics that are necessary for developing a society based on post-capitalist commons. This type of consciousness also points to how future commons would be different from pre-capitalist commons, which is a distinction we will have to make if we hope to move forward towards a post-capitalist future and not regress to pre-capitalist social formations. ∞ [123-130].

UNALOME.

A Buddhist symbol for the journey to enlightenment.
We start out without a direction
at the spiral at the bottom,
trying to unravel the way up.
Once we find our path,
the rest of life is lived out
with a series of up and down loops,
to at last find harmony in the straight line,
and ultimately fade
into the dot
at the end
of the
show.

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INDEX BY AUTHORS

VOLS. I–VII

ABBAS, THAIR, *Muslim youth. Paving the way for the future*, I *(1)* 2007.

AKOMOLAFE, ADEBAYO, *The promise of Promethean darkness. How a 'new' politics of astonishment is weaving a global alliance for the possible*, V *(1)* 2014.

—— *The trees still speak. The Collective Intelligence of the natural world*, V (2) 2014.

ALLEN, PAUL, *Meeting our 21st century challenges,* I *(1)* 2010.

ATLEE, TOM, *Conversation in the conscious evolution of social systems,* VI *(1)* 2015.

—— *The role of Collective Intelligence in the wise democracy needed for humanity's survival,* V *(2)* 2014.

—— *&* ZUBIZARRETA, ROSA, *The embodiment of wholeness in our social order: Our evolutionary challenge as humans,* VII *(1)* 2017.

AUSTIN, MICHAEL D., *Dreaming Earth,* III *(1)* 2012.

BACHE, CHRISTOPHER M., *Teaching in the new paradigm,* III *(1)* 2012.

BAETS, WALTER, *A-causality, Consciousness and organizations,* II *(4)* 2008.

—— *Consciousness and coherence in corporate success,* III *(1)* 2012.

BARRETT, RICHARD, *The ego-soul dynamics of Enlightenment,* VII *(1)* 2017.

BAUWENS, MICHEL, *P2P Revolution and Commons phase transition. Notes on the nature of the revolution in the P2P Commons epoch,* VI *(1)* 2015.

—— *The Open- Commons based knowledge society as a new configuration between State, civil society and the market,* V *(1)* 2014.

—— *&* BERGE, EDWARD, *Collective Enlightenment through postmetaphysical eyes*, VII *(1)* 2017.

BEEDIE, CHRISTOPHER L., *All in the mind? Placebo, and ergogenic effect of caffeine in sport performance,* II *(1)* 2011.

BENEDETTI, FABRIZIO, *The many placebo effects,* II *(1)* 2011.

BRADLEY, RAYMOND T., *Nonlocal, Consciousness, and the Eye of Love,* III *(1)* 2012.

BREWER, JOE, *Tools for culture design: Toward a science of Social Change?,* VI *(1)* 2015.

BRINKERHOFF, JENNIFER M., *Maximising the effectiveness of microenterprise development. The Partnership option,* I *(2)* 2010.

BROWNE-MILLER, ANGELA, *Survival instructions. Consciously adapting and enhancing human Consciousness,* III *(1)* 2012.

BRUGNONI, ALBERTO, *A Shariah-compliant microfinance fund. A much needed tool for the accomplishment of Islamic economics' goals,* I *(2)* 2010.

BRUIN, RENÉ – WOUTER, KEES, *The right to seek and enjoy asylum under siege*, III *(1)* 2009.

CASTILLO, LORYBELLE C., *Moving towards a death penalty-free world*, I *(4)* 2007.

CHESTERS, GREAME, *Exodus. From global civil society to radical disobedience,* IV *(1)* 2013.

CHOMSKY, NOAM, *The kind of Anarchism I believe in, and what's wrong with Libertarians,* IV *(1)* 2013.

CHOPRA, DEEPAK, *A critical issue: What to do when Darkness rises?*, VII *(1)* 2017.

CICERO, SIMONE, *On the role of platform based peer production and the Commons in the dynamic of innovation,* VI *(1)* 2015.

COHEN, ANDREW, *The evolution of Enlightenment,* III *(1)* 2012.

COLMAN, ARTHUR – MONTERO, PILAR, *The new longetivity,* V *(2)* 2014.

COLOMBO, ALESSANDRO, *The many futures of energy,* I *(1)* 2010.

—— *The relativity of innovation,* V *(1)* 2014.

COMBS, ALLAN, *Collective Enlightenment,* VII *(1)* 2017.

—— *Coyote Enlightenment. A story of evolutionary spirituality,* III *(1)* 2012.

COOK-GREUTER, SUSANNE, *Dear Spanda (LtE),* VII *(1)* 2017.

CORNELISSEN, MATTHJIS, *Consciousness, knowledge and the future of humanity. A miniature overview based on the work of Sri Aurobindo,* III *(1)* 2012.

COYNE, CHRISTOPHER J. – HALL, ABIGAIL R., *Anarchy, philanthropy, and the provision of public goods in a free society,* IV *(1)* 2013.

CRUMP, JOHN, *Many strong voices uniting to combat Climate Change,* II *(3)* 2008.

CZISCH, GREGOR, *The Super-grid*, I *(1)* 2010.

D'ELIA, SERGIO, *Calling for a moratorium on Death Penalty,* I *(4)* 2007.

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MAHARAJH, RASIGAN, *The Metabolic rift. Anachronistic institutions and the Anthropocene,* VI *(1)* 2015.

MARSHALL, ANDREW GAVIN, *An anarchistic understanding of the social order. Environmental degradation, indigenous resistance, and a place for the sciences,* IV *(1)* 2013.

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SPANDA

TWENTY-FIVE NARRATIONS TO DISCLOSE
THE STATE OF THE ART IN ENLIGHTENMENT STUDIES.

FROM EGO SOUL DYNAMICS TO EMBODIMENT OF WHOLENESS,
FROM POST-METAPHYSICAL EYES TO THE HUMANITY JOURNEY,
FROM COLLECTIVE INTELLIGENCE TO ACCELERATING CHANGE,
FROM DEVELOPING AWARENESS TO GLIMPSES OF INFINITY,
FROM POST-CAPITALIST COMMONS TO TRUTHFULNESS,
FROM COLLECTIVE TRAUMA TO EMOTIONAL CHANGE,
FROM COLLECTIVE AWAKENING TO CREATIVITY,
FROM CULTURAL MATURITY TO DIVINE NATURE,
FROM BLIND SPOT TO WE THE PEOPLE,

DISCLOSING
SHARED COGITATIONS

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