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INNOVATION & HUMAN DEVELOPMENT
The month of July (detail).
turning possible, but not always feasible

Under the burden of time delaying its own becoming – beware, the tribe is growing, the vibe is thriving...

While innovation is challenging the past within the linear necessity for performance of our civilized activities, the incoming nominal collective enlightenment contradicts itself beyond its own individual resolve to merge for good with the collective intelligence, despite the present contingencies deprived of all reasonable doubt and foreseeable hope. There is much more than what we ordinarily perceive as a bare expression of matter with its countless labyrinths of thought constantly reshaping the maze: Theseus is still chasing the Minotaur in the Menander of thoughts. Verily, the elephant in the darkroom of consciousness is in dismay: nobody alone is able to grasp the whole truth save for the paired collective vision. Here, the imposed implications of darkness are that, in absentia of light, none can seize the whole, which is only intelligible by a pooled endeavour. Mankind as a whole is exploring and re-elaborating its exodus from materiality as a new cipher of its own becoming, a process demanding of us to consciously share actions to maximize its outcome. The human species is clearly evolving to a new tier of development in which the individual paths are purposely joining together to foster its innovative gait.

In view of that, let’s then enlighten the darkroom to make innovation prosper in the linear historic path affecting its intangible outline. Is innovation a novel eidos yet to be embodied into matter? The expression of an evolving whole emerging from the spiritual-material hendiadys? Or a new modality of the enriched consciousness hovering upon the cliffs of a divided self? Whereas the collective consciousness bears an inherent anticipatory insight on the allegedly historic future, and space and time define extension – a hypothetical construct of the thinking mind – innovative itineraries from grass-root towards institution and from global to local – bottom-up and top-down at once – hold in the middle-out their crown of action, pooling and sharing resourceful knowledge form nowhere into to now here – beware, a minimal gap in a word may transmute the unbroken lemma into two-sided meanings. On another level, ontogenetic parallels phylogenetics in the individual-collective advance, the hyphen bridges the two realities to conclusively rest in its binding might: to open and establish a path between them, reinstalling its original contracting meaning of ὑπὸ ἕνα [hypó hén] “in one”. Once opened the channel between the two realities through the unifying function of the self – the initiation of old – energies can start flowing both sides¹. The point of observation in now in the middle, neither in the past nor in the future, neither in the medium nor in the message, not in the spiritual nor in the material grounds, but in the open common sourced knowledge in between them. Our own personal and aware contribution to this fresh unfolding of human consciousness is indeed a novelty.

In fact, these passing remarks along the path are circling words portraying the presence of a yet unclassified realm, a monad devoid of fissa dimora seeking ‘itself’ and the ‘other’ to hyphen the spiritual-material experience of life. Indeed innovation takes place everywhere at once by rebounding in the individual consciousness and, by becoming self-aware, fires up its mending process: a golden kintsugi joinery, melting the broken pieces of a fractured life into an edging evolving present. Dream incubators and visionaries gathered around the dialogical table to checkmate their roles: Whose turn is it? Who are the first and the last in Lila everlasting dancing? Creativity delivers its vision at urgent pace down-up the hills of perception into a steady rest; the hyphen binds the spiritual to the material into a transient present, a joyful hiatus in an unfolding while. Fastened to its unconfessable truth – neither in account of a past nor for a future stance – the evolutionary path is unifying the polarities all along its course, regenerating itself further and farther in its own becoming. Regrettfully, these outmoded terms do not uphold to their own obsolescence, unaware as they are of belonging to an earlier apologetic inspiration, classified by the hands of a well-mannered polite old gentleman: Death & Destruction vs. Immortality. Autocracy. Democracy, the ruling of the people, has failed its mandate in its current expression; sustainable development is on the verge of collapsing if its paradigm is not quickly revised. While governance has already acquired a vacuous grim, the scriptural elements of an unbearable chasm between the self and the other

¹ Beware, the tribe is growing, the vibe is thriving...
have gained the fore. Could we just withdraw and hold back in the presence of all this? Indeed we equally need to rapidly attune to the mesoteric dimension right into the eso- and the esoteric sides of reality, because being aware of only one of its sides equals sighting the vision with one eye only, depriving it of the perspective and depth of the binocular vision by which we consciously set off-time, history and matter, and dematerializes at once facts in both our profane and iveros-history – Sacred & Profane are a very well known epitome of duality on the mythical plane, like the Martian-Venusians antinomy, or the archetypal Adam & Eve duo. Far and wide, the underlying tension between the monistic and the dual perceptive has undergone the entire human linear time to the point that, in its over-represented archetypal dualism, we are lost to the ‘prohibited’ golden apple igniting a bursting development of events. Shifting the centre of gravity from the collective to the individual plane removes one layer of reality to our experience, and replaces it with the space-time dimension as a temporary point of reference. This flight from the collective provision makes its contents to be perceived by the individual flattened consciousness as mere symbols; conversely, shifting the centre of gravity from the individual to the collective plane discloses the symbolic reality. As a matter of fact, the syntropic function of the enlightened consciousness in reflexive mode merges the polarities, releases the symbolic content and mends the karmic remains from both the individual and the collective assembled history – a conjunction once symbolically represented sub species aeternitatis as the androgynous opus.

It may be noted that this igneous process ‘purifying’ matter of its historical account, has a purposive behaviour: an inner-outer drive, a final causation, an entelechy, a vocation, a conatus, an élant – analogous to the steer of the human will but on a different plane of reference – that from a state of permanent creation defines its own existence by becoming into being. It is an itinerary of a conscious act indwelling a saddle point, hanging in the balance between infinity and utopia in the mesoteric dimension, keeping its centre of gravity in the pinnacle of action, mastering the balance while altering the gaze to both sides at an increasing tempo in approaching the threshold of duality where time ceases to be. Here the time-space factor is at rest, quiet, silent. The still originating point between the opposites does not interfere in the unfolding act, it comprises them instead.

From this stillness of creation – depicted here as the fulcrum of action, the saddle point, the hyphen uniting the spiritual-material experience, or the hiatus, the point of suspension between inhaling and exhaling, or the point of balance and so forth – the creative energy bends into the time-space dimension to ignite innovation: the equilibrium is lost, one of the polarities is emerging – the concepts of free-will is certainly here at stake. In other words and within a different framework of reference, once the system reaches its apex, enathiodromy comes into play: the structure bends towards one of its sides and a new phase kicks off. The point of equilibrium between the maxima and minima of a function is its optimization; the extreme values, spatially and timely speaking, located at the boundaries of the system, are its critical entry points; the centre is the establishment. All innovations are the result of an eruption, of enlightenment, of an invasion from the critical entry points on the boundaries: from the fringe of the system, not from its centre. For this, fringe movement, especially in the arts and in science, set off at the boundaries of social systems (grass-root, bottom up) and, step by step, conquer-transmute gradually towards the centre, whose heterogeneous energetic field decreases to its critical minima limes at its boundaries. All innovations are starting up from the fringe, as the centre itself is connotated by a very stable and fixed, even though inherently dynamic, stance: indeed the establishment bears the status quo as its cipher. Ensuing, the conquering fringe will soon turn into mainstream and sit at the centre of action, to be, in turn, challenged by the new fringing waves again and again, scaling up in the order of things. In this dialogical relation between the centre and its periphery, in alternatively and constantly keeping and loosening the balance while retaining the centre of gravity anchored on the saddle point of the action in the mesoteric dimension, innovation turns the impossible into possible.

The mesoteric dimension is certainly not an augmented, enhanced, or altered plane of reality, but for real the natural state of consciousness of all human beings instead, visioning the spiritual-material gaze on both worlds, gaining in depth and perspective, digging their becoming in the historical self. Moreover, this dimension is nothing new, has always been individually accessible, the innovative side of the equation is in that no longer only distinct individuals but humankind as a whole are now shifting into their new ‘permanent’ station: the collective bodhi is knocking on heaven’s door: the longer we gaze into consciousness, the quickest it stares into us, actually we all are gradually imbuing the mesoteric dimension to get it through with comfortable ease. Clearly, humans did not ‘fall’ from a former blessed state of consciousness, from Arcadia, the Golden Age, Eden, and so forth, to the individual dualistic flattened dimension. Those are conceptual...
representations, pre-figurations, attracting visions of a handy condition in the making, at no time reminiscences of a past lost stipulation, rather the individual’s ubiquitous representation on the mental plane of the clan presumed destination, a symbol for the driving purposive force resting place beyond time, or of an enriched typological ‘rupture’ within a framework intelligible to the thinking mind. Definitely we are not fallen angels: we are spiritual-material beings consciously and individually contributing to the making of our own and the collective state of consciousness: hence, not heading to a lost paradise to be regained because of a fall, rather building the communal foundation of a fresh unfolding realm. We all are collectively, genuinely and gradually morphing the mesoteric dimension taking shape by our cooperative endeavour – indeed in this rests the very individual and common responsibility of humankind to shape its own becoming. Two diverging conceptual models are here at play: the static, unchangeable well ordered self-containing universe; and the unfolding ever-changing self-generating cosmos. All in all, the only fixed constant is the ‘law’, the Dharma governing them both, not the outcomes of its enforcement in the dynamic interplay of the polarities.

In this context, figuratively speaking on the plan of mental representation, even the hypothesis of a causal necessity – Moirai, destiny, Rta – could be perceived as the flow of conscious knowledge attaining self-consciousness, upheld by the Dharma linking, integrating, organizing the individual paths into the whole system. The relations connecting the individual dots could be seen here as the synapses connecting the dots-cells by virtue of a mindful relation, thereby enabling the flow of information from one dot to the other – on a different plan of representation, even the Internet biomimicries this process.

The emerging of the social consciousness, of the collaborative-sharing-caring economies, of the alternative currencies, the commons, of peer-and co-production, co-governance, co-creation and destructive creation, communitarian culture, inclusive capitalism, knowledge and common based societies and economies, mesoteric society and meso-economy, together with the obsolescence of the concept of property in favour of that of common possession, are all symptoms that a capital in pursuit of mere profit is no longer viable, it creates inequality, is unsustainable, obsolete; but all these emergences are also indicators of the merging on both the collective and individual planes of a variety of disciplines and cultures joining to unveil, conceive, forge, draft and implement global innovative insights, thoughts, and viable, sustainable, thrivable processes and devices. We are no longer questioning these days with no answer, pleading for an unborn answer, but offering innovative solutions to replace a bygone system in its place.

In this perspective, the faulty modern economic system could be seen as the outcome of a divided self; conversely, the new emergences rising from a process of reunification, are the tangible upshots of I and You merging in the collective self, from ego-driven to community driven, form selfish to altruism in which acceptance of the other mirrors the image of the self reflected in the countless points of light on the waves of the ocean of consciousness.

Everything goes by with a high or low pace, all passes and changes, today’s craze will tomorrow be obsolete. Acceptance of the status quo is regressive, as in a very short while it will turn into ante. Consenting to be and become, is to persistently accepting the life-driven imperative beyond the saddle point, at risk of losing it no matter how. An innovator is an explorer testing new paths farther beyond the secure zone, opening up new directions at each step, and leaving security at risk. The risk is a mental temptation inviting from afar, an attractor, not a pusher, and riding the tiger on a razor blade is indeed risky: leaning too much on one of the polarities and… bye-bye balance! the integral critical saddle point is lost, the present took a walk on the wild side…

Fear is actually a de-organizing principle acting upon the collective consciousness; qualities instead, are organizing principle and organized structural patterns inside the collective consciousness. Within the limits of a different terminological framework, or on a parallel plan of reference and meaning, qualities might be perceived as devas, angels, malakim. The old metaphors of the guardian angel holding in front of the carpet weaver the archetypal design to be woven into the cosmic fabric by means of the vertical warp and the weft horizontal axes joined at their intersection by the Gordian knot cut into the present, still very much holds very true. The global mind is at work, willingly or unwillingly, consciously or asleep we are all partaking in Lila cosmic game, of which much remains to be said.

“Who is messing around here? – said we, the divided I – The I, the Me or the individual Self?” “Quite a difference… ‘t wouldn’t have so said Elision? – the hyphen is one, but we are many, many and many, more than a few, turning both past and future into this present, both ways at both ends, as in the now all both are but one.”

The above de-contextualized inclusion in the body of the narration is functional in joining two layers of language: the authorial I and the ‘other’, the
very individual marker left into matter by both planes of language. So that:
“An unrestrainable cycle defeated Kronos at Hyphen Bridge and wrote history. Underneath, egotism and selfishness cognates until never is present in the unconstrained entangled now, whereas the present is never and ever at once.” “You mean that you want to know me?” “Yes! and hear your soundless voice, the say of the moon is charming” “Hum… What’s for?” said she. “The Moon is appealing, a great archetype, the Moon and the Sun, the opposites, the complementary, the higher and the lower, the lingam and the yoni. Show your beauty said the Sun, and the Moon fully shined all night displaying her intangible beauty, enlightening the dark night of the soul… You see! Some good lines just 4 u – said he turning the Luna-park lights off while riding the tiger in the moonless night – Night and Day, the co[s]mic couples are severing the conscious presence in duality: the blending of Black and White does not engender gray nightmares, but the lively rainbows blooming all around from nowhere: a shower of lights fulfils the soul melted in matter, and the spiritual-material dimension takes hold. Who could ever have dreamed of your last night elegant lack of reticence at sleep’s expense?” “I hope everything is fine now, even better than better” said she. Here again the narration changes of level, moves to another plane. The intersections of the narrative planes beyond all quadrants allow for the authorial I to subside to the We and melt in collectivity. This narrative, as perceived from the perspective of the hyphen generating the visible-invisible universe, the sacred-profane alphabet collating heaven to earth through the account of a vertical stroke expressed in verbal language, bear witness to its becoming. Careful! Contraction and expansion, the polarities are in hold… qui rationem artis intelligent.

In point of facts, the constant interplay of giving and receiving, of the individual and the collective, of expansion and contraction is giving birth to Lila dance in the mesoteric dimension. There are no independent beings, nor independent freedom, intelligences or shining devas here, but the common endeavour to preserve and sustain individuality in plurality, sameness in diversity. Complimentary implications are thus manifested; ethics and politics are already on stage. Lila is performing her ecstatic dance right in the middle of the two worlds, and affecting them both. There remains for discussion the fact that to perform rituals, postures and gestures from the outer to induce a certain state of consciousness has been the work of many practices and disciplines since old. In reality, is at first a state of consciousness to determine, inform and shape a gesture or a posture that, once codified or ritualized in the performance as a distinct position or as a set of actions, is then employed to regain and reactivate the higher state of consciousness that originally shaped it. Unfortunately, most codified rituals have nowadays relinquished their powerful innovative drive, the original vibration has dimmed and, devoid of creativity, their inner flow has nearly come to an end. In these days, the ritual sequel of postures is hardly conducive to any higher, collective or sacred dimension, its actions are empty, deprived of any innovative and tangible impel. As a matter of fact, innovation is a self-regenerative action, a self-innovating act. Mimicking the process of accessing the higher dimensions or the collective intelligence in order to implement sustainable and tangible solutions to current impelling concerns, Spanda has devised the innovative Lila virtual educational game platform, here offered as a dulcis in fundo serving at the end of this issue. The Lila platform allows accessing the collective ‘virtual’ intelligence from the individual ‘ordinary’ reality; therein, by means of a ludic capacity-building and policy-making methodological itinerary, collectively pool and share global and local knowledge to identify whatever problem or explicit issue and, collectively, draft the best specific solution to address them. Subsequently, withdraw from the virtual reality to implement the game winning solution into the world, in terra firma. A solution that carries in itself the vibrational quality of both worlds, an effective grasp on both reality in which actions and endeavours bear tangible outcomes on the individual and the collective plane. This stipulative definition rests on the concept of essence, of course.

In concluding, after so many meaningless wor[lds] we come to the end of an era while another is blooming, where the once cyclic, sacred and the linear historic times are no longer individual but glocal. Sacred & Profane, the two layers of being, the I and the Other, and all other complementary are gradually approaching oneness. As in human relationships an acquainted may turn into a friend, or into a lover, and diverse degrees of proximity, of closeness, of intimacy are then brought into being until all distinctions between the subjects are removed and unity is co-created.

But we all should well bear in mind that the feminine polarity so far historically and spiritually compressed is now emerging after ages of contraction; and keep clearly in consciousness that this too will be a ‘temporary’ stage on the plan of the manifestation, to perform its maximum expansion towards the saddle point, and then transmute into its opposite. This alternating in the historical time of the two polarities is only apparent, a
perceptual object trouvée on the way to a much longed transpersonal and impersonal self and beyond, clean, safe, devoid of any residual effects, more soaring than boring. Beware, the tribe is growing, the vibe is thriving…

1 This bridging function could be equated, on the physiological plane, to the corpus callous uniting the right and left brain hemispheres specific functions.
2 Cf. the purifying power of fire in Mithraic, Zoroastrian and Hindu rites, the Holy Ghost baptism by fire, the Phoenix myth, etc.
3 Sustainability and thrivability belong to different planes: the former is the capacity to endure in time; the latter, the how the ethical resilience persists in the former.
The month of September.
Michel Bauwens is the founder of the Foundation for Peer-to-Peer Alternatives and works in collaboration with a global group of researchers in the exploration of peer production, governance, and property. He has co-produced the 3-hour TV documentary Technocalyps with Frank Theys, and co-edited the two-volume book on anthropology of digital society with Salvino Salvaggio. Michel is currently Primavera Research Fellow at the University of Amsterdam and external expert at the Pontifical Academy of Social Sciences (2008, 2012). Michel Bauwens is a member of the Board of the Union of International Associations (Brussels), advisor to Shareable magazine (San Francisco), to Zambara Time Bank (Istanbul) and ShareLex; and scientific advisor to the "Association Les Rencontres du Mont-Blanc, Forum International des Dirigeants de l'Economie Sociale et Solidaire" (2013). He functioned as the Chair of the Technology/ICT working group, Hangwa Forum (Beijing, Sichuan), to develop economic policies for long-term resilience, including through distributed manufacturing. He series editorials for Al Jazeera English, and is listed at #82, on the Post-Carbon Institute (en)Rich list. Michel currently lives in Chiang Mai, Thailand, and is research director of the transition project towards the social knowledge economy, an official project in Ecuador (flosociety.org). He is a founding member of the Commons Strategies Group and has taught at Prince University and Dhurakij Pundit University’s International College. In his first business career, Michel worked for USIA, British Petroleum, Riverland Publications, Belgacom, and created two internet start-ups.

What exactly is an open-commons based economy and society? And how is it related to the issue of innovation? To understand it we must first look at the older social and economic model that it replaces. The neoliberal and present economic forms combine three basic elements, fundamental choices that guide their operation. The first is the belief that the earth’s resources are infinite, which allows an idea of permanent and compound economic growth, fuelled in part by a monetary system based on compound interest that requires such growth for its continued survival. Neoliberal capitalism is therefore based on an illusion of a fake or ‘pseudo-abundance’; and its growth mechanism is dedicated to the senseless accumulation of material riches.

The second is the belief that the flow of knowledge, science and culture should be privatized, and therefore serves the exclusive benefit of property owners. Knowledge is made to serve capital accumulation and the profits of the few. The privatizations of knowledge through excessive copyrights and patent regimes have a dramatically slowing effect, and allow for an exclusionary financialization. We believe that this second element dramatically slows down potential innovation, which is today no longer locked in the world of the private market and corporate R&D departments but has become a general characteristic of networked civil society, with millions of people engaged in innovation for sustainability. A good recent example is the explosion of civic innovation in the field of 3D printing, which had to wait the lapse of the patents.

Finally, the two first elements, pseudo-abundance and artificial scarcity, are configured in such a way that they do not serve social justice, equality, and benefits for all, but rather the benefits and profits for the few. Under cognitive capitalism, the fruits of social cooperation are enclosed and financialized, and the majority of the population has to pay for knowledge that is largely socially produced. Only those with money can benefit from technical and scientific innovations. Think of the business models of Facebook and Google, whose platforms would be valueless without the input of the userbase, yet, where none of the profits are shared with the value-creating public.

Thus we must also look at the positive counter-reactions that have emerged and which have been particularly strengthened after the crisis of neoliberalism, which was felt by southern countries in the previous decades but became global in 2008.

A first reaction has been the recapture of the state by citizen movements, such as particularly in the Andean countries and Ecuador. According to the last ECLAC report on Latin American poverty, Ecuador and Venezuela have obtained the largest scores in poverty reduction in 2012.
The second is a re-emergence and flowering of new economic forms based on equity, such as the cooperative economy, the social economy, and the solidarity economy.

Third, we have seen the emergence of a sharing economy, which is mutualising physical infrastructures (most often in the form of private platforms) in order to make available the enormous amount of surplus material and resources that have been created in the last thirty years. Apart from the explosion of car-sharing and bikesharing, they often take the form of ‘peer to peer marketplaces’, allowing citizens to create more fine-grained exchanges of their surplus.

Fourth, and perhaps most importantly, we have seen, thanks largely to the potentiality of the global networks, the emergence of commons-based peer production. Globally and locally, productive communities of citizens have been created vast common pools of knowledge, code (software), and design, which are available to all citizens; enterprises and public authorities to further build on. Often, these productive knowledge commons are managed by democratic foundations and nonprofits, which protect and enable the common productive infrastructure of cooperation, and protect the common pool of knowledge from exclusionary private enclosure, most often using open licenses; they are sometimes called ‘for-benefit associations’.

Very often, these productive communities co-exist with a dynamic entrepreneurial coalition of firms co-creating and co-producing these common pools, thereby creating a dynamic economic sector. It is very common for these open eco-systems to displace their proprietary-iP based competitors. A US report on the ‘Fair Use Economy’, i.e. economic activities based on open and shared knowledge, estimated its economic weight in that country to be one-sixth of GDP.

Yet there is also a paradox: it is most likely that it is the classic corporate forms that first see the potential of the new commons-based economic forms, and ally with them; on the other hand, cooperative economic forms still rarely practice and co-produce open knowledge pools. However, there is an emerging trend to transform the existing cooperative tradition based on single-stakeholder governance, into multi-stakeholder governance, and which introduce the care of the common good in their statutes.

What this means is that the emerging global knowledge economy, can today take two competing forms. In the first form of the knowledge-economy, under the regime of cognitive capitalism, we have on the one hand the continuation of proprietary iP, and the realisation of economic rent by financial capital; combined with a new form of ‘netarchical’ capital, which enables but also exploits social production.

In my opinion, the other, more desirable form of the knowledge-based economy is based on open commons of knowledge, but which are preferentially linked to an ethical and equitable economy.

In the old vision, value is created in the private sector by workers mobilized by capital; the state becomes in the best of cases a regulating mechanism for the common good, but in the current reality rather a market state protecting the privileged interests of property owners; and civil society is a derivative rest category, as is evidenced in the use of our language (non-profits, non-governmental).

In the new vision of cognitive capitalism, the networked social cooperation consists of mostly unpaid activities that can be captured and financialized by proprietary ‘network’ platforms. Social media platforms almost exclusively capture the value of the social exchange of their members, and distributed labour such as crowdsourcing more often than not reduce the average income of the producers. In other words, the ‘netarchical’ version of networked production creates a permanent precariat and reinforces the neoliberal trends.

In the contrary vision of a open-commons based knowledge economy and society, value is created by citizens, paid or voluntary, which create open and common pools of knowledge, co-produced and enabled by a Partner State, which creates the right conditions for such open knowledge to emerge; and preferentially ethical entrepreneurial coalitions which create market value and services on top of the commons, which they are co-producing as well. The ideal vision of an open-commons based knowledge economy is one in which the ‘peer producers’ or commoners (the labour form of the networked knowledge society), not only co-create the common pools from which all society can benefit, but also create their own livelihoods through ethical enterprise and thereby insure not only their own social reproduction but also that the surplus value stays within the commons-cooperative sphere. In this vision, the social solidarity economy is not a parallel stream of economic production, but the hyper-productive and hyper-cooperative core of the new economic model.

Thus in the new vision, civil society can be seen as consisting as a series of productive civic commonsense, common pools of knowledge, code and design; the market consists of preferentially actors of the cooperative, social and solidarity economy which integrate the common good in their organisational structures, and whose labour-contributing members
Finally, in this vision, the Partner State enables and empowers such social cooperation, and creates the necessary civic and physical infrastructures for this flowering of innovation and civic and economic activity to occur.

The Partner State is not a weak neoliberal state, which strips public authority of its social functions, and retains the market state and repressive functions, as in the neoliberal model; it is also not the Welfare State, which organizes everything for its citizens; but it is a state that builds on the welfare state model, but at the same time creates the necessary physical and civic infrastructures for social autonomy, and for a civic production model that combines civic immaterial commons and cooperative social solidarity enterprise.

The ethical economy and market, is not a weak and parallel economy that specializes in the less competitive sectors of the economy; on the contrary, the ethical market is the core productive sector of the economy, building strong enterprises around competitive knowledge bases. It is however, at the service of civil society and co-constructs the open knowledge commons on which society and commerce depends.

What needs to be achieved is a new compact between the commons and the private companies that insures the fair distribution of value, i.e. a flow of value must occur from the private companies to the commons and the commoners from whom the value is extracted. Models must be developed that allow privately owned companies to become fair partners of the commons. In the end, no privately-owned company, using its own research staff and proprietary IP, will be able to compete against open ecosystems that can draw on global knowledge production and sharing; this process of fair adaptation must be encouraged and accompanied by both measures from the commons and their associated ethical enterprises, and by the Partner State, in a context in which all players can benefit from the commons. Private capital must recognize that the value there are capturing comes overwhelmingly from the benefits of social cooperation in knowledge creation; just as they had to recognize the necessity for better and fair pay for labour, they must recognize fair pay for commons production.

1 Six of the 11 countries with information available in 2012 recorded falling poverty levels. The largest drop was in the Bolivarian Republic of Venezuela, where poverty fell by 5.6 percentage points (from 29.5% to 23.9%) and extreme poverty by 2.0 percentage points (from 11.7% to 9.7%). In Ecuador, poverty was down by 3.1 percentage points (from 35.3% to 32.2%) and indigence by 0.9 percentage points (from 13.8% to 12.9%). This 5.6 percentage point decrease in Venezuela translates into a 19 percent decline in poverty overall last year, which CEPR Co-Director Mark Weisbrot noted last month “is almost certainly the largest decline in poverty in the Americas for 2012, and one of the largest – if not the largest – in the world.” <http://bit.ly/QYpxJw>.

The month of October (detail).
The Coronation of the Virgin.
Helene Finidori focuses on systemic perspectives and tools for transformative action, mainly interested in connecting dots and building bridges between people, cultures, disciplines, organizations, transitional stages. Co-founder and coordinator of the Commons Abundance Network, she teaches Management and Leadership of Change in the International Program of Staffordshire University. Born in Canada and raised in France, Helene lived in many countries including Sweden, the US, Indonesia, Australia, and she currently lives in Spain. After studying entrepreneurship at HEC in Paris she specialized in small and medium enterprise and created a niche speciality at the intersection of strategy, branding and organizational development. She worked in the waste management and consumer product industry, for business-to-business marketing consultancies, as an independent consultant specializing in innovation, IT and prospective, as well as in education and social development. From brand positioning, culture and strategy she moved to organizational change and cross-cultural collaboration and now focuses on social change, networks and movements.

EVERY DAY NEW VOICES SPEAK UP AGAINST THE TOXICITY OF AN ECONOMY BASED ON CREDIT-FUELED GROWTH THAT BENEFITS MOSTLY BANKS AND SPECULATORS, DEPLETING FINITE RESOURCES AND DESTROYING MUCH OF THE SOCIAL FABRIC AND THE PLANET IN THE PROCESS. SOME CALL IT SUICIDE.

The paradox is that the logic we find ourselves in tells us that the system can only survive and thrive with more of the same: a perpetual machine based on an extract, exploit, deplete model, mindless of its impossibility and accelerated spiralling side effects that make problems worse.

MOST TRAVELLED ROUTES

Our institutions are systemically dysfunctional because of a propensity to travel and consolidate the most travelled and visible routes in terms of organization (hierarchies), business processes (best practices and winning models), communications (network effect), which are at the same time accumulative of power and robustness, and fragile because they nurture monoculture and mass behaviour by design, accumulating risk as well. Hierarchical structures are conceived for branching out and consolidating exchanges along pathways that solidify with time and size, as scale and activity of each node empowers the higher echelons, accumulating resources and power. Capital and power have been steadily concentrating in fewer hands since the beginning of the Seventies. This systematization and concentration bolster overexploitation, dominant positions and bureaucratic paralysis in a self-reinforcing process.

The fact that banks and global corporations, with the suppression of most limits on activities and concentration, have become too big to fail and to jail is an illustration. Dominant positions enable them to secure and reinforce their rights and power over potential new entrants and sovereign rules globally. Global corporations have the power for example to sue nation states to enforce their right to exploit natural resources under multilateral trade agreements (such as Canadian gold mine against El Salvador under CAFTA agreement), and banks have the power to oppose restrictions (with the UK treasury suing the EU on Banker’s bonus caps). Intellectual property rights are expanded by attempts to monetize increasing parts of the commons and public domain, such as water, the genome or seeds, software, which are forced and over-enforced on emerging businesses or countries. Intellectual property is also used to block the development of technologies susceptible to disrupt business models. Cases of patent non-use for litigation purpose or technology suppression such Stanley Meyer’s water fuel cell abound. Innovation is stifled in the process, and the status quo based on extraction, capture and toxic outcomes is maintained.

Communication follows a comparable pattern. Its potential massiveness and the speed at which it can scale, gain momentum and trigger reactions, applied to cultures of peer reviewed expertise and reputation networks, where the largest network or the most famous and showcased attract ever more members or audience, encourages the convergence of behaviours towards the same most recognized and travelled routes. As a result these routes remain the most travelled ones, pulling behaviours into more normalization and sameness, and into deceit when accumulated capital serves the protection of special interests.
Similarly, management recipes are over applied. Focus is on the rate of application of models rather than outcomes, loosing track of why they were used in the first place and ignoring possible unintended consequence and the associated socialization of risks and costs. ‘Winning’ management models or investment strategies that are taught as best practices in business schools around the world become the most travelled route also, systematized. This is how occasional financial leverage (the use of debt to multiply gains) became permanent over-leverage that culminated in the 2008 crisis, and how return on capital ratios invented to prioritize investments in post WWII periods of scarce capital became the ultimate criterion for investment, encouraging short term wins through non productive investments and speculative behaviours, and capitalized financial returns.

Harvard Business School innovation management professor Clayton Christensen notes that companies over-focus on convergent innovation such as efficiency aimed at optimizing productivity in what already exists, which in the short run frees capital, increases margins and boosts financial market performance. In the long run however, efficiency alone when not accompanied by disruptive innovation tends to draw markets into price based competition, leading to diminished profits, thus undermining the very activity it is meant to make more efficient. Christensen deplores that so much effort is dedicated to seeking above average returns on the financial markets to the detriment of long-term investment in disruptive innovation, in a context where capital is particularly abundant.

When corporations and investors massively operate on the basis of similar information and use similar management models and investment decision criteria, it becomes increasingly difficult to make a difference other than by beating costs, through restructurings that are sometimes ‘imposed’ by activist investors, or by beating the clock, in other words, by getting ‘there’ faster. A race epitomized on the financial markets by high frequency trading, which is finally under criminal investigation.

In this context divergent or disruptive innovation struggles to develop into viable forms not to mention scale, and the multitude of sustainable alternatives that emerge at the margin has difficulties to make itself visible. Paradoxically peer-to-peer and many-to-many interactions that were meant to ‘liberate us’ from centralized power and distribute innovation and opportunities are also affected as the network effect tends to grow existing networks rather than foster bridge-building between multiple networks, and multiple ad hoc reassembling. The network effect works against the ‘long tail’ that internet was meant to provide access to: the statistically insignificant possibilities under the Pareto principle that are the less ‘visible’ or accessible because they don’t constitute a critical recognized mass....

Facebook and Google contribute to ‘normalization’ and to preventing the long tail from being fully visible as they tailor the display of user content automatically to the users’ anticipated expectations based on their prior searches or behaviours, reinforcing identities and what is already known generating what is called confirmation bias. And they keep the long tail for themselves to monetize. They are the new winners of the game, using this systematization to their advantage. Benefiting from the network effect that exponentially accelerates rates of subscription, they ‘own’ the network, accumulating members and user-generated information that they sell as market intelligence, and as a result they generate huge profits with little capital intensity. By ‘owning the network’ they own the intelligence of the crowd, which enables them better than anyone to anticipate trends and watch what emerges in the long tail. Their capital accumulation enables them to purchase new technology at unimaginable prices, as evidenced by the USD 19 billion purchase by Facebook of Whatsapp the smartphone chat application with 55 employees, zero revenue and 500 million seers and its purchase of Occulus a virtual reality headset development not yet commercialized for two billion dollars, in the face of its crowdfunders who had proven the concept. Meanwhile, Google is actively acquiring robotic companies and seeking breakthroughs in artificial intelligence. Will this intelligence turn against the majority of humans and serve the dominant few, or will distributed collective intelligence prevail, and serve human development and thrivability? This is the challenge at hand.
best practices and winning mechanisms can become toxic if abused. We are in the typical configuration described by Schumpeter three quarter of a century ago, predicting the demise of capitalism from its own success, with monopolies and giant corporations taking life out of the capitalist process, ousting the small firms and ‘expropriating’ its owners, and thus destroying or tilting creative destruction by undermining its sociological foundation based on the entrepreneur.

For French economist Thomas Piketty capitalism is destroying itself because capital accumulation became an end in itself, reducing opportunities for entrepreneurship. For Piketty, the 20th century managed to disrupt accumulation of wealth and power gaps because of wars and crisis. If we want to avoid disruptions as catastrophic as we experienced in the 20th century, the systemic reinforcing dynamics that accumulate risk at exponentially growing paces, must be disrupted by real meaningful ongoing innovation in many domains that clearly contributes to humans’ and nature’s renewed thrivability. A prospect that the overwhelming majority of humanity is looking forward to, but doesn’t quite know how to bring about, trapped in the crazy mechanics of the system.

**THE WORLD IS A COMPLEX LIVING SYSTEM**

Beyond these dysfunctionalities, in its fundamentals, the world is a complex adaptable system made of natural and human ecosystems that operate optimally with principles that help it take care of itself, in a stable and non volatile state at the edge of chaos, that is where complexity lies, between order and total randomness or chaos.

The complex adaptive system is formed by a multiplicity of parts or agents in partnership working individually as whole local systems, with their own organizations and rules, and operating at various integrative levels and scales, forming emergent nested wholes. Individual wholes self-organize and self-realize within their own boundaries while being influenced by each other’s behaviours and by their changing environment, which they influence in return. They cannot be totally controlled by external forces, only shaped and limited by them.

Patterns of behaviours emerge – or arise – in each part out of a multiplicity of interactions between agents adapting their responses to each other’s behaviour. Emergent behaviours initially invisible often appear into sight all at once, what we call tipping points. They are often the only thing visible from parts or wholes or phenomena that may be hidden from sight, the unknown that brews under the surface. As the number of interactions and types of behaviours increase in number, behaviours and their consequences are increasingly complex and unpredictable.

Stability and integrity of a system are the result of continuous successions of adaptive cycles of exploitation, conservation, release, and reorganization which take place at multiple levels and scales following different rhythms, which arise internally and are externally influenced, creating emergent dynamics.

The figure above illustrates the adaptive cycles of complex systems, or panarchy cycles. Cycles of exploitation and conservation result in accumulation, the condition for the system’s efficiency and robustness. Cycles of release and reorganization result in what Schumpeter called creative destruction, the conditions for the system’s resilience and renewal. At the individual level
this succession of cycles corresponds to life or cradle-to-cradle cycles. At the whole system’s level, the process of creative destruction is what (re)generates variability, or the diversity needed for periodic reshuffling within levels to maintain adaptive capability and opportunity, and for reorganization across levels to maintain integrity ‘at the edge of chaos’. The process as a whole can be related to Adam Smith’s invisible hand at work… Both Adam Smith and Schumpeter were somewhat precursors of complex adaptive systems theory!

In this context a sustainable system is one that has the capacity to create, test and maintain adaptive capability as well as opportunity or potential for self-realization of all its components, one that can ensure and maintain the thrivability in time and the regenerative capacity of the parts and the whole.

The renewed variability of the system is essential for this process. Reducing variability and diversity and ignoring the interactions between all the human and natural parts as systems themselves that compose the wider system create conditions that can cause it to switch into a degraded state controlled by unfamiliar processes…

**LEVERAGE POINTS**

Where and how, then, to intervene?

Donella Meadows spent much time studying leverage points, the places in complex adaptive systems where small shifts in one place can have very broad effects. Meadows established a list of twelve types of leverage points by level of intervention and order of effectiveness. At the highest level, the most effective points, but also the most difficult to change are psychological and cultural, related to the worldview and paradigm from which a system arises.

The goal of a system is the next most important leverage point from which all the others derive, enabling the system to self-organize within its own boundaries. This includes the system’s rules, its accountability and correction mechanisms, and the elements that help it go through its adaptive cycles, such as the structure of the information flows that enable self-correction, the gains obtained from driving reinforcing feedback loops, and the strengths of balancing feedback loops relative the impacts they are trying to correct against, with the delays of reaction to change, that all have an effect on and are in return shaped by the interactions within the system, what is accumulated, how things flow, and the actual stocks, buffers and parameters of the system – such as infrastructures, resources, operative principles.

Meadows notes that leverage points are sometimes counterintuitive as the most obvious solutions may actually fail to produce the desired change. This is what we are observing here, stuck in an exploitative and conservative phase by a paradigm that focuses generally on driving gains from reinforcing feedback loops epitomized by credit based resource hungry growth and short term based capitalized revenue, with little focus on release and renewal, at least at the mainstream institutional level.

The over-reactivity of the economy to instantaneous news or events combined with the slow rates of change of institutional structures and practices that are passing thresholds or limits, are indeed a recipe for collapse.

What was meant to accumulate opportunity for the system as a whole to regenerate potential for its individual parts to thrive in economic, social and natural terms has morphed into opportunity for concentration and accumulation of power and capital reinforcing dominant positions of the few and accumulating of risk for the whole. The fact that most of the adaptive cycle panarchy graphs now have capital in abscissa as the purpose of the exploitation and conservation phase (goal of the system) where it used to be potential, is noteworthy.

Re-focusing the goal of the system from the accumulation of capital and other factors of production to the abundance of commons as factors of opportunities and regeneration for the thrivability and renewal of the system could serve as a medium for accelerating the adoption of practices that address social, environmental and economic dimensions in a sustainable, cohesive and interconnected manner.

**POWER POLITICS**

What is our margin of manoeuvre for change?

This widening gap between the richer and the poorer at a global scale, the subsequent accumulation of power, the visible effects of climate change, the volatility and speculative nature of the financial markets and unsustainable industrial practices are starting to draw criticism from all corners of the world and all strata of society. The success of Thomas Piketty’s Capital in the 21st century that exposes rising inequalities can attest it. The challenge is increasingly recognized as one of political will and power ascendancy in political decision-making, including in the mainstream. Whether at the UN, the World economic forum, prominent economists, now starting in the media, more voices are denouncing the excesses of a power elite that tilts the system to its advantage to continue and multiply the status quo,
or who just benefits from the mechanical effects of dynamics at play.

When looking at how the social coupling between corporate and human life forms and the economic coupling between economy and environment can be achieved for our complex system to thrive, Jack Harich argues that all the ‘truths’ and solutions necessary to operate these couplings already exist and are well known but that classical activism continuously fails to succeed because it deals poorly with the ultimate root cause of change resistance which is to be found in the effectiveness of political deceptiveness. Accumulated wealth provides the leverage and the means to invest massively on simplified or false memes that make more complex memes difficult to convey and grasp, and keep it that way. Memes that favour the status quo and the self-multiplication and self-reinforcement of self-multiplying self-reinforcing loops are the ones that win in a race to the bottom among politicians. We have seen this illustrated with the recent further weakening of campaign finance laws in the US where the first amendment has been invoked to justify the right to massively fund candidates and advertise – including through negative and attack ads – during election campaigns: Money and propaganda as freedom of expression! It seems we are on the way to touching the bottom of this race, as the deception is increasingly coming into sight. Movements such as Occupy Wall Street have succeeded in making some inroads because the movement has focused on bringing to awareness these systemic aspects and leverage points rather than piecemeal demands. And the demands for separating money and politics and limiting paid campaign communication in the US is probably something that could start triggering virtuous loops by opening opportunities for more balancing policies and mainstream practices worldwide.

Concentrating innovation consciously on the mechanisms of systemic change and leverage points, at all levels and scales and bringing all potential change agents that sense the misdirection and fragility of the system on board may spur radical transformation.

**ATTITUDES TO CHANGE**

Typical responses on how systemic change can occur reflect the perspectives people have on their possible influence on the system and the ‘forces’ at play. This is an area that deceptive memes can significantly affect.

On the optimistic laissez faire side, there is an indefectible trust in the genius of mankind and technology, helped by the invisible hand of the market, to naturally take us out of the predicament we are in while keeping us in control. This form of evolutionary change is part continuous on its human development aspects and part disruptive with technology breakthroughs. Without embedded balancing feedback loops, this would probably keep us on the travelled and accumulative routes, expanding possibilities for hubristic heroes – billionaires ‘on a mission’ – to preside over the salvation of the world. One can imagine that when climate change becomes ‘reality’, opportunities would arise for privately unilaterally deployed geo-engineering solutions...

On the pessimistic resigned side there is a sense of doom and helplessness in face of the magnitude of the catastrophes that can fall upon us, disempowered by the belief that it is too late, that humans are driven by the impulses of their genes and therefore not responsible for the unforeseen consequences of their acts or that they are cogs in a machine that crushes everything on its path. A mindset that actually serves the self-reinforcing patterns as it affects the capacity to act for change and keeps reinforcing loops on their current exponential trajectories towards self-fulfilling prophecies. This view expects total melt down. Radical change, where the glimpse of salvation if any occurs once we hit a bottom, or earlier it is hoped, with a massive wake-up call around which to rally. Here also, let’s not assume that this would cause a more enlightened renewal. As Naomi Klein described in the *Shock Doctrine*, catastrophes are often good opportunities to secure more power. Chaos often is the start for totalitarian responses.

The potential for continuous widespread disruptive innovation and radical change rests in the field of change agents or activists who are actively engaged and are taking things into their hands. The legions of realistic optimists of all types of backgrounds who perceive current dangers and the need for systemic change, even when they don’t really know what needs to be done and how they can get involved. These are the ones who need to be inspired, empowered and enabled. They observe and are aware of where the world is going and they have the capacity to apply changes on the ground everyday.

Active realistic optimists prefer not to assume that solutions will emerge on their own, neither do they consider the perspective of a total breakdown as a negligible remote probability. French philosopher Jean Pierre Dupuy’s ‘enlightened doomsaying’ approach, suggests that holding the possibility of a catastrophe credible enables us to become more proactive and to chose, among all options available, those that will in the end push the catastrophe away or make it acceptable...

The challenge is to leverage agency and the capacity for humans to engage and act wherever they may
find themselves, in a way which can cohesively steer the system in a new direction to avoid the worst.

**W I C K E D P R O B L E M S**

The large open discussions I moderated or attended, in particular those gathering systems thinkers from various backgrounds, revealed it was easy to agree on the systemic nature of the challenge, the acceleration, accumulation, interconnection of multiple threats, the reduction of the variety and the need to intervene at multiple levels and scales, the urgency and the need for coordination. When it came to coordination however, it was much more difficult to reach consensual agreements on causes, priorities, values, not to mention roles and responsibilities or courses of action. We could acknowledge the existence of a variety of responses, share several examples, and even proposals, but unless there was some form of homogeneity of practice or worldview in the group, we were unable to construct a ‘common’ coordinated response, design a common vision of what the future would look like or agree on a framework, even one that would accommodate a variety of responses.

And this is not surprising, because the economic, social, environmental and political mess we are in is an intricacy of interconnected wicked problems, as Ackhoff, Rittel and others have described them. The characteristics of wicked problems among others are that they cannot be formulated in a definitive way because there are many different perspectives of a same problem and different narratives to explain them. There are multiple points of intervention as problems can be symptoms of other problems. There are no right or wrong, true or false solutions. Solutions may be contradictory and involve trade-offs. There is no history or proven practice and expert knowledge to refer to, data is uncertain and often missing, and the best information necessary to understand the problems is distributed in the contexts affected by the problem.

Angles of approach and solutions are multiple among change agents and activists. The diversity of people, backgrounds, cultures, disciplines, information acquisition modes and cognitive processing preferences, psychologies, worldviews influence the point of entry into an issue, the ‘direction’ of the process involved, the type of outcome sought out, and the level of intervention. What people say needs to change or the types of change they are engaged in amount to a whole universe of possibilities!

Below is an illustration of how various paradigms and main engagement and action logics that drive change can be expressed in relation to the commons as archetype, and the types of innovation that arise for each of them.

These engagement and action logics clusters are inspired from Susanne Cook Greuter’s leadership development framework and from Barrett Brown’s work on communicating with many worldviews. They reflect the affective, cognitive and behavioural dimensions of what motivates people’s engagement and action choices, and therefore are descriptive of perspectives and preferences, and modus operandi and not prescriptive. There is no ‘better’ action logic than another, or no need for people to evolve from one to another. All are ‘real’ and present as participatory collectives that each function with their own logic, organization and unity.

**N I C H E S A N D C L U S T E R S**

Change agents driven by their own engagement and action logics, linked to the paradigm out of which they would like the new system to arise, gather around the social objects they are attracted to, the leverage points they seek to act upon for effective results, which determine priorities and the pathways envisioned.

These social objects are the nodes around which emerging social movements converge and common visions and praxis are shaped, forming clusters of cooperating specialized agents. That is where meaning is created and shared through languages that help us understand each other, where conversations and repeated interactions are initiated, and from where new territories are explored.

The action frameworks that are built or shaped from practice to serve movements and communities provide a context for co-individuation: the processes by which identities of individual and collective change agents are formed, transformed, and differentiated in relation to each other and to the forces that hold people together and fuel their capacity to act and react to signals in cohesive and effective ways. Clusters grow and boundaries expand with the arrival of new agents driven by similar engagement or action logics that create new opportunities for interaction and adaptation, allowing for agents to co-evolve and for a system to innovate locally, this is what makes diversity so important.

At the same time however, as these frameworks create ‘natural boundaries’ around clusters of cooperation or ‘niches of action’ they become ’exclusive’ of alternative frameworks. This hinders relational dynamics and our capacity to collaborate across groups outside of our domains of action. As all niches have different opinions about the challenges the world is facing and the ways to address them, each tries to convince others
### Engagement Logics

#### Going Back to the Source and Essentials, and Mother Earth
This manifests the cultural, mythical, sacred, spiritual dimensions of the commons and commoning. The commons logic is expressed as replenishment, harmony, attunement, giving, communing with each other and nature, honouring all beings and life. Examples are found in the ancestral traditions of indigenous societies and movements inspired from them, such as the Buen Vivir and Pachama traditions of Latin America, the spiritual teachings of the Native Americans and the Aboriginal Australians, traditional medicine and meditation practices. They usually intervene in confrontation with modernism.

#### Self-protecting Livelihoods Fighting the System as Survivors or Heroes
This manifests the empowering, enabling dimension and distributed nature of the commons. The commons logic is expressed as generative of opportunity, autonomy and resilience. Examples are found in commons and peer-to-peer activism, intellectual property activism, open source and open access movements, commons based peer production and makers hackers movements, or new forms of co-working and entrepreneurship, relocalization, alternative currencies. They usually intervene outside of and in opposition to institutional contexts.

#### Creating Legitimacy & Stewardship through Governance & Institutions
This manifests the stewardship and governance dimensions of the commons. The commons logic is expressed as protection of the commons through institutions, law & policy, ethics & governance, limits and boundaries. Examples are found in conservation, human rights, justice & equity activism, right to access movements, global commons activism, or in polycentric or subsidiary forms of governance, commons governance forms, Pigowlian taxes, and open government. They usually intervene at the global UN or national levels and in NGO’s, political parties and unions contexts and may be under suspicion from the others as the concept of commons is easily co-optable.

#### Seeking Rational Solutions & Efficiencies via New Strategies & Mechanisms
This manifests sciences, technologies and ‘tools’ serving the commons. The commons logic is expressed through management and conservation/preservation technologies and models, new macro and micro economic models and policies, new organizational forms, governance and business models, integration of externalities, new indicators and metrics. Examples are found in the conscious capitalism, circular regenerative economy approaches, clean technologies and renewable energies. They usually intervene in the belly of the beast and may be under suspicion from the others as the concept of commons is easily co-optable.

#### Fostering Emotional Relationships Between People & with Nature
This manifests the commons as social practice and outcome, the loving, caring, sharing, participatory, inclusive, consensual dimension of the commons. The commons logic is expressed as community involvement, social responsibility, learning, collaborative practices, practices of wellbeing. Examples are found in new forms of local communities and communities of practice such as transition towns or eco-villages, community agriculture, new forms of consumption, the gift and sharing economy, community currencies. They usually intervene at the local community level.

#### Understanding Systems & Complexity Linking Theory & Practice
This manifests the systemic, dynamic and integrative aspects of the commons. The commons logic is embodied as a system and process generative of opportunity and thrivability, interweaving contexts and development, and the cultural, natural and technological aspects. Examples are found in permaculture and bioregionalism, systems and design thinking and process methodology as well as capacity and leadership development, and in advanced dialogue methodologies. They usually function transversally and integrate interventions at multiple levels and scales.

#### Transforming Self & Others Integrating the Material, Spiritual, Societal
This manifests commons as enlivenment, at the interplay of awareness, thought, action, and effect. The commons logic is expressed as experience of wholeness of existence through mind and spirit, deep sense making and awareness of systems interactions and dynamic processes requiring personal transformation. Examples are found in integral and spiritual movements, developmental psychology, grounded in evolutionary psychology. They usually intervene from the deepest introspective level to the widest cosmologic level.

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that they hold the best solutions and methodologies, trying to ‘funnel’ all the other solutions through their perspective.

Our territory of action as a whole is actually composed of islands that do not share the logic, the motivators and the narrative...

### Unity in Diversity?

As change agents, most of us acknowledge the critical need for systemic change and for collective intelligence and action, but we are facing a paradox. What seems to make us effective agents focusing on our respective domains of engagement and action is specifically what prevents us from unifying and being effective as a whole. There is a tension between the transcendent structures that coordinated action seems to require and the immanent distributed nature of agency. This structure versus agency debate is one of the greatest challenges for systemic change.

In practice, attempts to organize a global response to a global challenge and unite ‘across islands’ are often
associated with ideals of shared vision and discourse, and common structures meant to bring the vision to reality, such as common language and values, organizational forms or systems of governance and action plans which may be prescriptive and normative. Because of the specialization of agents and the non-interchangeability of engagement and action logics, these attempts often result in a dilution of focus and therefore of prospects, leaving all parties weakened and in delusion. Alternatively they foster the adoption of ‘unifying’ ideologies, reductionist both in thinking and action in ways that can ultimately put systems at risk and lead to totalitarianism – back to square one, the travelled routes into sameness. Eventually they crystallize existing contradictions and perpetuate conflicts between solutions or alternatives. Something Occupy and other recent self-organized movements have worked to overcome, avoiding action plans and demands, with some success but also shortcomings, in particular as far as being able to understand each other ‘across islands’, particularly when not speaking the same ‘language’.

AN ECOLOGY FOR TRANSFORMATIVE ACTION

The legions of change agents already busy intervening on a variety of leverage points or ready to be mobilized form an ecology for transformative action, with its multiple niches and clusters, adaptive and generative processes, patterns of relationships, and capacities for co-evolution. They are distributed within the wider system where they have the potential to drive systemic change and human development. The critical point is for these distributed and locally organized efforts to coalesce in order to change the feedbacks and information structures of the system and its capacity for renewal so that the system can take care of itself in a healthy way.

In the changing image of man approach, however, just as many approaches based on developmental psychology or vertical development, make a conceptual case based on evolutionary predicaments and consciousness development – and therefore paradigm shift – as a goal, assuming that transcending our levels of consciousness and the order of complexity from which we develop and apply solutions is necessary before engaging into effective change. In other words they postulate that people need to change themselves before they can change the system.

The model I suggest here is founded on the coexistence and complementarity of the positive components within each paradigm, and at each level of consciousness and perception of complexity. It focuses on the immediate operational capacity and the existing capabilities of the ‘efficient’ agents’, and on the conditions under which they can leverage the potential for change in their own context, each brushing a stroke of the impressionistic changing image of man while bringing a stone to the systemic change process in a co-evolutionary way. By construction, it includes the vertical development models.

Human development is as much an emergent property of the collective/aggregated application of agency through praxis and the outcome of change itself, as it is a prerequisite for change. There is a feedback loop at work here also.

Looking at the universe of possibilities for intervention and innovation as an ecology for transformative action enables to envision change and problem solving not as a transcendent, centralized or controllable process that encompasses sets of critical and prioritized components and leverage points into one master plan or framework, but as an immanent distributed self-directed and self-renewable one composed of myriads of master plans and frameworks that complement each other.

ACHIEVING COHERENCE: THE UNDERLYING LOGIC

Ann Pendleton-Jullian describes ecosystems of change as scaffold to aggregate the different kinds of powers and mechanisms that are out there, and support the emergence of the new until it becomes strong enough to affect power structures. She suggests a new type of metanarrative. Something strategically ambiguous towards which to head despite our differences, and that can draw coherence from a variety of disparate micro narratives that shape events and build trust at the grassroots level.

For process philosopher Bonnie T Roy, the unifying principle or metanarrative would need to increase
the diversity of the system. It must not try to transcend and resolve differences, but it must preserve and add to them. The unifying principle would be underlying, not overarching, and act an undertow for transformative action.

There’s a universal aspect to what drives social movements around the globe even if we cannot clearly translate it in comparable terms across practices and languages. Much of what these movements are currently engaged in is dedicated in a form or another to protecting the environment, people and resources from enclosure, over-exploitation and abuse, and to generating opportunity for thrivability in various forms.

Typically, activist interventions focus on the prevention of overshoot and collapse due to the current accumulative feedback loops that generate losses rather than gains for the system as a whole in multiple domains. There is also significant activity and creativity on disruptive innovation, oriented towards the release and renewal phases of the adaptive cycles that enable the system to reorganize so that resources are regenerated and remain accessible and opportunities remain healthily distributed and renewed, as these successions of adaptive cycles cannot take place naturally on their own in the current state of things. This proceeds from Buckminster Fuller’s maxim that you never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

As a whole, what drives movements for change connects to the commons as archetype – a collectively inherited unconscious idea, pattern of thought, image, etc… universally present in individual psyches. Commons in their widest definitions are embodied in the timeless (re)generative systems that humanity shares to protect, care for and renew resources and opportunities for self-realization and thrivability. They encompass the objects of care and factors of opportunity and livelihood, the participatory processes and practices that enable this caring, and the outcomes and ‘common good’ that result from these practices, which become in turn objects of care and factors of opportunity. In their many shapes and manifestations, all need to be protected, nurtured and renewed.

The commons logic is one of protection and accumulation of factors of opportunity and renewal for the regeneration of the system (versus conservation and accumulation of factors of production), mindful of limits and boundaries, which manifests itself as system goal in multiple forms and languages, through different action logics, understandings and symbolic representations.

The commons logic is versatile enough as underlying logic to guide action at various levels and scales, and tangible enough in operational terms to be expressed in the form of a pattern language and building blocks that can help existing movements on the ground articulate their own understanding and representation and express converging system goals and leverage points accordingly. Such pattern language can also serve as vetting system to assess the impact of social change initiatives and sustainability policies and practices and help operate inescapable trade-offs, so that people within mainstream institutions trying to instil other logics into the system can do so in more confidence that their efforts would not be neutralized or co-opted.

Each change agent or movement for change holds a piece of the response to the wicked problems we are confronted to. The commons logic has the potential to bring the pieces together, aggregating disparate efforts, strategies and narratives on the ground as a scaffold for a new system goal and dominant paradigm to emerge and steer the system in a new direction, with no prescriptive or algorithmic orchestration.

If movements, change agents and innovation based communities could describe the reality and the phenomena they observe on the ground, and learn to distinguish in the perspectives of others what is different from their own, if they could discover and travel within the landscape of transformative action, and mutually recognize their coexistence, the common ground and potential synergies, then they wouldn’t need to ‘bargain’ a middle ground or a synthesis. Just by acknowledging differences and by learning to discover what they don’t know, natural channels would open up through which understanding can flow and things (including agreement) can happen. The awareness that they would gain would result in positive feedback loops reinforcing their own action and that of the whole towards a shift, providing forms of orientation that can help decision and action, and improve multi-stakeholder dialog and conflict resolution along the way.

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1 - COMMODIFICATION

Commodification is a term that describes the transformation of something, a good or a service that does not have an exchange value, into a commodity, into something that can be bought and sold on the market. Before this transformation, the commodity might have been a public good or a common good, or something that did not have any property relations at all. Commodification is a process that originates with, and is driven by, capitalist economies. Commodification turns gifts into commodities. It turns both material things (objects) and immaterial things (services) into goods with a very specific and measurable value.

In social theory, the commodification process has received much attention from both Marxist and non-Marxist commentators. There seems to be a broad consensus that commodification is a fact, the capitalist market has become increasingly powerful, pervasive and hegemonic, the logic of the capitalist market colonises and destroys the logic of community, and that the market swallows more and more areas and aspects of life that hitherto have not been regulated by monetary measurement and monetary exchange. We find first theorisations of this view in the work of Lukács (1967, first published in 1923), Polanyi (2001, first published 1944) and Debord (1994, first published in 1967), and more recently in the work of Wolfe (1989), Jameson (1991), Giddens (1998), Thrift (2000), Gudeman (2001), Harvey (2005, 2007), Hochschild (1983, 2003, 2012), Illouz (2007), Boltanski and Chiapello (2007), Zelizer (1994, 2007), and many others.

In the neo-liberal age the process of commodification has expanded considerably. But it has also turned severely sour. It has become both more brutal and more absurd. In this article, I wish to argue that this might not be just another stage, it might be the final stage of commodity glorification. It might be the moment where commodification is reaching a dead end.

There are not that many things left that have not been commodified. Furthermore, the pathologies that are produced by a commodified world are becoming increasingly obvious. When capital replaces human relationships, houses which could shelter the homeless remain empty, food which could feed those who are starving rots in silos, care, love and friendship are replaced by services, trust gets replaced by quality control, connectedness is replaced by a network sociality, and the diktat of measurement transforms whatever was unique at some point into modular building blocks that become comparable, exchangeable and replaceable. If everything can be bought the gift loses its value. If everything can be bought human relationships lose their value. It is common sense that this is not a desirable future. Arguing from a geopolitical perspective Harvey (2010: 217) makes a similar point:

What spaces are left in the global economy for new spatial fixes for capital surplus absorption? China and the ex-Soviet bloc have already been integrated. South and south-east Asia are filling up fast […] What new lines of production can be opened up to absorb growth? […] At some point quantitative changes lead to qualitative shifts and we need to take seriously the idea that we may be at exactly such an inflexion point in the history of capitalism. Questioning the future of capitalism itself as an adequate social system ought, therefore, to be in the forefront of current debates.

It is obviously impossible to back up a claim such as the end of commodification with any evidence.
This is the territory of prognosis. However, I want to offer more than pure speculation or wishful thinking. I would like to develop two arguments that demonstrate why the process of commodification might indeed be hitting the wall. The first is about digital technologies and the crisis of capitalist production. It is about the classic Marxian argument about the internal contradictions of capitalism. The second argument, which really is at the core of this article, is about the digital commons as an emerging process of countercommodification.

2 - DIGITAL TECHNOLOGIES AND THE END OF WORK

For Karl Marx, capitalism is characterised by an inherent concentration of capital. The accumulation of capital creates competition, which in turn leads to monopolies, the concentration of means of production in the hands of fewer and fewer producers, and more generally to the concentration of wealth. The more capital becomes concentrated in the hands of fewer and fewer capitalists, the less the working classes can afford to buy the goods they produce. Ultimately the growing polarisation of the class structure produces social instability and class struggle. This analysis is famously known as what Marx calls the inherent contradictions of capitalism. There is also an inherent contradiction between the forces of production (the tools and technologies, but also the knowledge and the organisation of labour that are used for the production of goods) and the social relations of production (the class structure, the distinction between those who own the means of production and those who do not). This is about the consequences of technological innovation.

In a nutshell the argument goes like this: innovations in science and technology increase productivity. But they also replace labour power – at least to some extent. Technological innovations throw people out of work. Marx writes about a ‘disposable industrial reserve army, which belongs to capital quite as absolutely as if the latter had bred it at its own cost’ (Capital, vol. 1, Chap. 25). As technological innovations do not create surplus value, the replacement of labour power with machinery leads ultimately to a decline in the profit rate.

Recently, Kliman (2012) published an analysis of the underlying causes of the contemporary crisis. He argues against the conventional wisdom that this is a crisis of financialisation or a crisis of neoliberal capitalism. Marx’s law of the tenderfall in the rate of profit is at the heart of Kliman’s argument. His analysis of statistical data demonstrates that capitalist economies never fully recovered from the recessions of the mid-1970s and early 1980s. In fact, he has gathered an overwhelming set of data to support his claim. The rate of profit did indeed decline after the post–World War II boom. Kliman argues that there is no such thing as good capitalism, which needs to be protected against bad capitalism:

Thus the contradiction within capitalism and the effects of the contradiction do not stem from any particular form of capitalism, and they cannot be overcome by replacing one particular form of the system with a different one. To overcome them, it is necessary to do away with capital, which requires, as we see, doing away with commodities and the production of commodities. (Kliman 2012: 27).

If Marx is right and technological innovation has the tendency to save wage labour, then we must get seriously worried if we apply this logic to digital technologies. Castells (1996) was probably among the first theorists to outline how digital technologies fundamentally transform work and society. Digital technologies provide the basis of what Castells calls the information age. What characterises the current technological revolution is not the centrality of knowledge of information, but the application of such knowledge and information to knowledge generation and information processing/communication devices in a cumulative feedback loop between innovation and the uses of innovation (1996: 31).

It is this relation between knowledge and information on the one hand and digital technologies on the other hand and their feedback loops, which has produced technological change at such an accelerated pace. Castells argues that in the digital age, information is becoming a product. So the fundamental difference between industrialism and informationism is that now all industrial sectors (agriculture, manufacturing, the service industry, finance) operate with digital technologies. Thus, if technological innovation has labour-saving effects, digital technologies are capable of producing labour-saving effects on an enormous and unprecedented scale as these technologies are now at the very heart of all productive activities.

In a recent study, Brynjolfsson and McAfee (2011) explore the exact impact of digital technologies on productivity, employment and wages, analysing statistical data about jobs growth in the USA. This is a rigorous analysis, with a convincing conclusion that rejects conventional explanations about the rise of unemployment such as cyclicality or stagnation and puts forward instead an ‘end of work’ argument. The end of work argument, developed by Rifkin in a book with the same title, makes a case for a development in capitalist economies ‘in which fewer and fewer workers will be needed to produce the goods and services for the global population’ (Rifkin...
This, they argue, is a direct consequence of the rapid progress in the development of digital technologies. Brynjolfsson and McAfee make a compelling case about the rapid inroads of computers. Referring to exponential developments in artificial intelligence, they demonstrate how pervasive and unexpected innovations in the development of computers turned out to be. Translation programmes and fully automated cars that perform in traffic without any human involvement are good examples to support this case. Brynjolfsson and McAfee make similar claims about innovations in medical diagnostics and voice recognition. Increasingly computers are able to demonstrate skills and abilities that used to belong exclusively to humans. ‘Of course, these are only a small sample of myriad IT-enabled innovations that are transforming manufacturing, distribution, retailing, media, finance, law, medicine, research, management, marketing, and almost every other economic sector and business function’ (22). Lanier (2013) makes a similar argument and hits home the message with some compelling figures. Kodak, says Lanier, employed 140,000 people, Instagram employs just 13.

So how is it possible that innovations in digital technologies have accelerated on such an unprecedented scale, while incomes are stagnating or even declining? Brynjolfsson and McAfee see a clear correlation between technological innovations and disappearing jobs. They also see a correlation between growing productivity and growing inequality. ‘Recent technological advances have favoured some skill groups over others, particularly “superstars” in many fields, and probably also increased the overall share of GDP accruing to capital relative to labour’ (51). It is the feedback loops between the production of knowledge and information on the one hand and information processing software on the other hand which are so crucial for Castells that make digital technologies ever-more pervasive, create unimaginable accelerations in technological innovations and lead at the same time to a decline in employment and an acceleration of inequality.

While I am far from claiming that technological development is the only cause for the current crisis of capitalism, it is certainly one important factor and a factor that is often neglected by those who focus on finance and neo-liberal capitalism. It is also important to emphasise that the decline in employment is not a decline in labour in general, but merely a decline in wage labour. There is enough work for everybody. Unemployment is not caused by (digital) technologies, it is caused by capital, by the use of technology in a very specific political economy and a very specific organisation of work. This brings me to my second argument regarding why we might not exactly be ‘living in the end times’ (Žižek 2011), but perhaps more hopefully, in the end times of an increasingly commodified world.

3 – THE DIGITAL COMMONS AS COUNTER-COMMODIFICATION

The realm of production is where social inequalities are clearly revealed and, moreover, where the most effective resistances and alternatives to Empire arise. (Hardt and Negri 2000: xvii) Obviously there is no such thing as commodity determinism. Like all processes, resistance and the search for alternatives have accompanied the process of commodification. Not everybody seeks happiness through purchasing power, appreciates a branded life, likes celebrity culture, and values commodities more than social relationships.

Not everybody gives in to the pressures that accelerate commodification. This has always been a contested field and a field of struggle. In every period in the history of capitalism, the processes of commodification have been accompanied by social practices of counter-commodification such as the late 1960s counter-culture or the back-to-nature movements at the turn of the twentieth century. While these processes of counter-commodification have articulated a powerful critique of capitalism, they were never strong enough to develop alternative practices that pose a serious threat to capitalism.

Over the last three decades, the digital commons, a new movement and space of counter-commodification, has emerged and continuously gained in strength. I want to argue that the digital commons is not just any other disruption of the process of commodification, it is the field of a fierce struggle over the future of the Internet and the future of capitalism. It is potentially the moment that pushes back the frontiers of measurement, value and quantification towards qualities, values and an expansion of the gift economy.

The commons refers to natural and cultural resources that are shared by a community of commoners. These resources are not privately owned, they are owned and shared by the community of commoners. These resources can be such different things such as land, language, music or software. They are either created or administered by the commoners. Every commons consists of three elements: 1) people who share the commons (the commoners), 2) resources that are being shared, and 3) a normative framework that sets out how the common resources should be created, shared, maintained and developed further. Underestimating this normative framework and the possibilities of establishing rules that are accepted by all commoners might have been the crucial weakness in Hardin’s (1968)
he has coined these terms to describe a new ‘non-market production’ or ‘social production’ of knowledges, languages, codes, information, affects, and so forth (Hardt and Negri 2009: xiii). Interaction and further production, such as the realm of culture, refers to ‘results of the realm of nature, but to the immaterial world’ (Ostrom 1990). The digital commons does not refer to the material world and the open-source movement. This is a struggle about open access to digital commons. This is a struggle about open access to digital commons. This is a struggle about open access to digital commons. This is a struggle about open access to digital commons.

However, Hardin did not take into account that the commoners are able to communicate, establish normative frameworks and to manage possible conflicts over individual interests in a productive way. Much of the political economy of Elinor Ostrom is dedicated to this issue. Her work, which received the Nobel Prize for economics in 2009, inspects the governance of a great number of commons in the material world (land, air, water, etc.) that achieve sustainability and avoid destruction. Without getting into too much detail, Ostrom (1990) argues that a range of principles needs to be in place for the commons to function properly. I want to mention two of these principles. Firstly, any commons in the material (natural) world has to establish a set of rules. Secondly, those who do not obey to these rules have to be sanctioned by the community of commoners.

Over the last few years, the commons has had an enormous revival. Surely this is also a consequence of Ostrom’s work, but it has a lot to do with the astonishing rise of the digital commons. The digital commons does not refer to the material world and the realm of nature, but to the immaterial world and the realm of culture. It refers to ‘results of social production that are necessary for social interaction and further production, such as knowledges, languages, codes, information, affects, and so forth’ (Hardt and Negri 2009: xiii).

It does not refer to things that are already there used and maintained by humans (e.g. the land), but to things that are being created. It refers, as discussed ahead in more detail, to immaterial labour. Furthermore, the digital commons refers to those areas of the Internet that are not built on market production. This is a new form of production, which Benkler (2006) calls variably ‘non-market production’ or ‘social production’ or ‘commons-based peer production’.

He has coined these terms to describe a new model of socio-economic production, in which large numbers of people work towards common goals without any financial compensation for those who contribute to the common good. The digital commons is an Internet repository of code, information, knowledge, and culture that is collectively produced and freely available to everybody who wants to use or modify these resources. While the digital commons is often associated with the social web (for very good reasons though), it has emerged nearly two decades earlier with the rise of hacker cultures. It started in the 1980s with free software and the open-source movement. But it has widened and accelerated on an astonishing scale only during the last decade, with the emergence of the social web. It has spread from the peer production of software and code to text, sound, images, and moving images, with Wikipedia, WikiLeaks, Pirate Bay and the Creative Commons as some of their iconic websites.

The digital commons consists of a multitude of Internet-based commons such as the software commons, news commons, information commons, knowledge commons, art commons, entertainment commons and many more. The digital commons does not have do deal with the problems outlined by Hardin. There is no conflict between the interests of individual commoners and the interests of the community of all commoners. This is due to the nature of the resources that are being shared. Material things being shared become reduced. An apple being shared between two people leaves each of them with half of an apple only. The more people share a house the smaller the house gets for everyone. The sharing of digital things does not reduce these things, but multiplies them. A file being shared with others becomes many files. For a more in-depth analysis of the qualities of sharing in the digital age see Wittel (2011). Clearly, Hardin’s assumed conflict between individual commoners and the community at large does not make much sense in the digital world.

There is another conflict, however, that needs to be theorised carefully – the conflict between the practices of counter-commodification by the community of digital commoners and capitalism’s attempt to capture the digital commons. This is a struggle about open access to digital resources, access to knowledge, copyright and intellectual property, the freedom to connect with others without surveillance and data mining, and about capital’s push for new laws and policies such as Anti-Counterfeiting Trade Agreement (ACTA), Stop Online Piracy Act (SOPA), and PROTECT IP Act (PIPA) to restrict the digital commons. This is a fierce struggle indeed, and the case of Julian Assange, the lawsuits against activists such as Bradley Manning and Jeremy Hammond, as well as the suicide of Aaron Schwartz are personal testimonies of what is at stake.

‘What is possible in the information age is in direct conflict with what is permissible,’ writes Kleiner (2010: 7):

The non-hierarchical relations made possible by a peer network such as the internet are contradictory with capitalism’s need for enclosure and control. It is a battle
to the death; either the internet as we know it must go, or capitalism as we know it must go.

Obviously this is a rather simplified analysis which does not take into account the various developments and forms of co-operation and new models and arrangements between both sides. Nevertheless, it is a pointed and condensed outline of the political economy in the age of digital media and distributed networks. There is a technology that opens up new productive forces, there is a political-economic system with established relations of production. There is struggle between those who want to conserve existing relations of production and those who attempt to overcome them. And there is an indication of how to create a better world. Could the digital commons teach us how to think about society at large?

Over the last decade, the digital whirlwind has created havoc in the so-called creative industries. Non-market production is now competing with cultural goods produced for a market. However, the threat that the non-market production of the digital commons poses to market production does not have to be limited to copyright industries only (music, film, publishing, software, etc.). As explained earlier, digital technologies are now embedded in all productive activities. Therefore the digital commons has the potential to disrupt market production on a much broader scale, deeply affecting sectors such as finance or manufacturing. We can already see the seeds of such developments in various open manufacturing projects as well as in peer-lending initiatives and new digital currencies such as Bitcoin. Undeniably the digital commons has an enormous potential as a space of counter-commodification. At the same time, this is a rather fragile and vulnerable space. To understand this, we need to explore in more detail the notion of free labour. We also need to explore the rather specific political economy of the digital commons.

4. Free Labour?

The free labour debate has been initiated by autonomist Marxists close to the Italian Operaismo School. It is connected to the writings of Maurizio Lazzarato and Michael Hart and Antonio Negri on immaterial labour, which is situated with the turn towards a post-Fordist mode of production and its related processes such as the transformations in the organisation of work (the organisation of the labour process), the production of subjectivity and social relations in work environments, and biopolitical capitalism where capital ultimately captures life. Immaterial labour is both intellectual labour and affective labour.

The concept of immaterial labour is inspired by a few pages in the Grundrisse, where Marx (1973) writes about wealth creation and the production of value which is increasingly independent of labour:

\( \text{(T)he creation of wealth comes to depend less on labour time and on the amount of labour employed [...] but depends rather on the general state of science and on the progress of technology [...] Labour no longer appears so much to be included within the production process; rather the human being comes to relate more as watchman and regulator to the production process itself [...] It is, in a word, the development of the social individual which appears as the great foundation-stone of production and of wealth (Marx 1973:794f).} \)

According to Marx, at some stage in the development of capitalism, knowledge, technology, and the general intellect firstly become somehow decoupled from labour and secondly replace labour as the source for the creation of value. These observations in the Grundrisse sit uneasy with Marx’s (1996) analysis in Capital, vol. 1, where he develops the labour theory of value and categorically insists that labour is the only source for the creation of exchange value. It is not hard to see why these pages in the Grundrisse become so crucial for the concept of immaterial labour.

Terranova (2004) is perhaps the first theorist who thoroughly engaged with the concept of free labour. In an essay, which was first published in 2000, before the arrival of the social web, before Wikipedia and social media platforms, she conceptualises free labour as the “excessive activity that makes the Internet a thriving and hyperactive medium” (73). This includes “the activity of building web sites, modifying software packages, reading and participating in mailing lists and building virtual spaces” (74). Consistent with the operaismo discourse on immaterial labour, she situates the emergence of free labour with post-Fordism. “Free labour is the moment where this knowledgeable consumption of culture is translated into excess productive activities that are pleasurably embraced and at the same time often shamefully exploited” (78).

Undoubtedly the ‘free labour’ concept has proven to be highly productive for an illumination of new developments in the social web. It is one of the key challenges in digital capitalism to rethink labour for those human activities that blossom outside wage-based relations. However, the concept suffers from a severe lack of analytical rigour. Elsewhere I have argued that the frequent pairing of free labour with both exploitation and alienation is rather unsubstantiated. The claim that free labour is being exploited by capital has never been convincingly supported, either with any empirical evidence or with a plausible theoretical argument
(Wittel 2012). Here, I want to focus on the problem of free in free labour. Or to be more specific, on the notion of free labour as unpaid labour.

It is usually assumed that free labour is labour that is not financially compensated. Things are more complicated, however. The digital commons is created through a variety of forms of labour with respect to cross-subsidisation. Let us look at the production of open-source code. There is a growing tendency towards the funding of open-source projects by companies such as IBM’s support of the Linux foundation with subsidies and the financial support of some Linux developers. Furthermore, it is important to point out that an open-source software developer is usually not a shopkeeper during the day, who starts producing code in her spare time. The overwhelming majority of open-source programmers are employed programmers, who work for software companies. Often, open-source code is produced anyway but then made available to the open-source community (Weber 2004). So the labour that goes into the development of open-source software is often indirectly paid for. A similar argument could be made for the knowledge commons. A Wikipedia entry on, say ‘modernity’ is likely to be written by a specialist on this topic, a philosopher perhaps. It is likely written by someone who is or has been employed by a university.

This is the reason why some areas within the digital commons have developed with mind-blowing speed, whereas other areas remain largely underdeveloped. The open-source commons and the knowledge commons are spearheading the digital commons for a good reason, as those who invest in building it often do get an income for their work. Other areas, for example the arts commons, remain largely underdeveloped, as other parties do not pay for labour invested here. These commons grow indeed with unpaid labour only, they rely on the passion, the love, and the enthusiasm by those who contribute and invest in it without any financial compensation.

Handa wants to surprise her friend Akeyo with a gift. She puts seven delicious fruits in a basket, a banana, a pineapple, a guava, an orange, a mango, an avocado, and a passion fruit. She carries the basket on her head and walks towards Akeyo’s village, wondering which of these fruit her friend would like best. Without Handa noticing it, animals take the fruits in her basket. A monkey helps himself to the banana, a zebra eats the orange, an elephant picks the mango, a giraffe goes for the pineapple, and so on. Eventually the basket on Handa’s head is empty. While she keeps walking towards Akeyo’s village she passes a tangerine tree. At this moment, a goat cuts loose from a rope and runs straight into the tree. As a result of this jolt a good amount of tangerines fall off the tree. Many fall straight into the empty basket, thereby refilling it. When Handa eventually meets Akeyo, she tells her friend that she has brought her a surprise. She puts the basket down. “Tangerines!” shouts Akeyo with joy and excitement. “My favourite fruit”, Handa replies: “Tangerines? That is a surprise.”

Handa’s surprise by Browne (1994) is a famous children story. It is a beautiful tale of friendship and gift giving. The children featured in her book are from the Luo tribe in southwest Kenya. This narrative in a very rural setting in Africa, I want to argue, is also a narrative about the economy of the digital commons. This economy is largely based on the principle of gift giving.

In order to understand the political economy of gift giving, we should turn first to the work of Marcel Mauss. For my line of thought I want to highlight two things about Mauss’ (1954) seminal work on the gift. Even though this is research on far-away non-capitalist economies, Mauss makes an important contribution with respect to Marxist concepts of the nature of capitalism. While Marx went to great lengths to demonstrate in his theory of historical materialism the fluidity and the transitional potential of dominant modes of production (like the feudal mode of production already contained some seeds of a capitalist mode of production, every dominant mode of production in history already contains the seeds for what is to come next), his analysis of the capitalist mode of production did not really make an attempt to explore the seeds of a mode of production that could be a successor of capitalism. With the work of Mauss, we get an idea that these seeds might be forms of gift exchange. We also learn to understand that there never was and never will be a pure capitalist economy where everything is being subsumed under capital. A capitalist economy will always coexist with a gift economy. In fact, they have an important commonality. Both, gifts and markets are examples of human exchange. Two decades after Mauss, Polanyi (2001) made a similar point, and more recently Hart (2008) and Hart, Laville, and Catranin (2010) originated the term human economy, pointing to areas of human economic activity that are not primarily driven by the logic of measurement and the logic of the market.

The second point about Mauss’ analysis of the gift economy that is relevant for my argument is his insistence on the reciprocal nature of gift giving. For Mauss, gifts are not just gifts and not just free...
lunches. They come with obligations. They have to be returned. Each gift is part of a system of relationships between the gift-givers and the recipients. This system is being built over time. For him, gift-giving exchanges are contracts; they are not legal contracts but contracts nonetheless. They are just less visible than the contracts of capitalist markets. The obligation to give and to return the gift is part of a moral framework that structures interactions. This is a moral system that highly values solidarity.

There is something very reassuring in Mauss’ analysis of gift giving. We do not need money; we do not need quasi-objective systems of measurement with respect to economic exchange. People will not abuse this system. In fact, there is overwhelming empirical evidence that they will try very hard to comply with it. For if they cannot, they might lose status and respect, and lose face within their communities. They might, or they might not. All this depends on context and circumstances.

The gift economy described by Mauss is a system that has a great deal of similarities with Marx’s possibly best outline of what communism could mean: ‘From each according to his ability to each according to his need’ (Critique of the Gotha Programme).

Marx’s idea of communism and Mauss’ analysis of the gift economy are not about quasi-objective measurement and individual gain, they are about very different values, relationships, community, solidarity, balance and equilibrium. For an analysis of the political economy of the digital commons, I wish to argue that we can only draw on Mauss in a limited way. This is largely due to his insistence on reciprocity and on the obligation to return the gift. Clearly, the gift-giving practices in the digital commons are not based on reciprocity. An open-source programmer does not expect that everybody who uses her code will return the favour and write open-source software themselves. The author of a Wikipedia entry does not expect that those who read the entry will be obliged to write an entry themselves. A teenager who puts a home-made video on a social media platform does not expect that those who watch her video will also upload moving images on this platform. The gifts produced and distributed in the digital commons are not addressed to specific individuals, they are much more unspecified. It is not quite clear who is at the receiving end of this exchange. These gifts, very much like works of art and very much like blood donations, are gifts to abstract communities. Ultimately they are gifts to humanity.

So how can we theorise forms of gift giving and gift receiving that are not being returned? The work of Serres (2007) on the parasite provides rich inspiration for such a task. The parasite is a book about relationships, about human relationships and about relationships between humans, nature and the universe. Very much in stark contrast to Mauss – and for that matter to all structuralists – Serres does not see much tidiness, harmony, and order. For him there is asymmetry, imbalance, noise, interruption, and transformation. There is movement and metamorphoses. He rejects binary models for an understanding of relationships. His concept is ternary and involves the host, the parasite, and an interrupter who shakes things up, reverses roles, and reconfigures relations. “For parasitism is an elementary relation […] The relation upsets equilibrium, making it deviate. If some equilibrium exists, or ever existed somewhere, somehow, the introduction of a parasite in the system immediately provokes a difference, a disequilibrium” (182). These relations are a succession of parasitic chains. He describes how flows of energy between organisms are never symmetrical and equal, but always asymmetrical and unequal. The parasite is feeding on the energy of others, stealing this energy without giving back anything to the host. History hides the fact that man is the universal parasite, and everyone around him is in a hospitable space. Plants and animals are always his host; man is always necessarily their guest. Always taking, never giving.

According to Serres, man is always a parasite to the sun and the sun is always a host for all living beings on the earth. This is a vitalist perspective that also applies for social relationships and economic relationships.

In the natural world, it is sometimes not easy to distinguish hosts from parasites. Bees and flowers need each other, both give and take, but they give and take different things. In the digital realm, it can be equally difficult to distinguish parasites from hosts. We have to take a situational approach. Depending on the circumstances users and producers, hackers and pirates can be either hosts or parasites. Like the parasite the pirate is imaginative, creative, and innovative. Like the parasite the pirate remixes, interrupts and disturbs things, creating disequilibrium and metamorphoses, thereby turning into a host to give new life for new parasites or new pirates. The digital commons partly gets built through social exchange or collaboration, through people who are – in love or in hate – working together on a Wikipedia entry, who exchange knowledge, ideas, information and affect. However, the digital commons also works in asymmetrical, one-way flows described by Serres, where some people just give and others just take.

Serres’ vitalism also applies to the realm of work, which “undoubtedly […] is a struggle against noise” (86). Life works. Life is work, energy, power, and information. It is impossible to translate this description into an
ethical discourse […] The work of life is labour and order but does not occur without borrowing from elsewhere (88).

At a first glance, Serres’ parasite sounds dark and dystopian. However, this is only true if we focus on the parasite. It is important to note that Serres focuses his attention on both, the parasite and the host. His book might as well have been called the host. There is no parasite without host, no taking without giving. Also, what might be seen as a dark undertone in Serres’ philosophy sounds beautiful in Handa’s Surprise.

Handa makes a big effort to carry her gift (the basket filled with different fruit) to her friend. On her way to Akeyo’s village, different animals behave like parasites. They steal fruit from the basket without giving anything back. Fortunately a tree comes to Handa’s rescue. The tree is the host who is interrupted in its calm existence by the goat who bumps into it. Due to this interruption, the tree gives its tangerines to Handa without taking anything back from her. In the end all the interruptions of the original plan turn out to be just perfect as tangerines are Akeyo’s favourite fruit. Or in Serres’ words:

What travels along the path might be money, gold or commodities, or even food – in short, material goods. You don’t need much experience to know that goods do not arrive so easily at their destinations. There are always interceptors who work very hard to divert what is carried along these paths. Parasitism is the name most often given to these numerous and diverse activities, and I fear that they are the most common thing in the world (11).

The difference between Mauss on the one hand and Serres and Browne (the author of Handa’s Surprise) on the other hand is not a moral difference; it is a conceptual difference only. Where Mauss sees reciprocity and therefore equilibrium, balance, mutualism, and exchange, Serres and Browne see asymmetry, imbalance, interruption, and transformation. For an understanding of the digital commons the asymmetric relationships of Serres might be conceptually more productive than the reciprocal relationships of Mauss. In this respect, the digital commons is not so much a gift economy but an economy of contribution. The contributions made for the digital commons surely are gifts, but these are gifts to humanity, not to specific and selected people. They are gifts without an obligation to return the favour.

Distinguishing peer production as a new mode of production from market-based production (with an emphasis on equivalent exchange) and firm production (with an emphasis on hierarchical organisation) Stiéfès (2007: 9) writes: “Peer production […] is based on contributions. People contribute to a project because they want it to succeed, not because they need to earn money or have to realise some previously established plan.” Those who want to contribute to the digital commons will do so. It is their own choice, there is no coercion.

The difference between a gift economy based on reciprocity and a non-reciprocal economy of contribution is not just an academic subtlety. It matters and has profound implications for the development of the digital commons. A gift economy does not need to be regulated from outside or from above. It regulates itself in bottom-up processes as balance and equilibrium are an integral part of such a system. It sorts itself out. But an economy of contribution is uneven, with some people contributing more and others less.

So we need to ask if uneven contribution poses a problem for the development of the digital commons. The problem obviously would be about compensation for contributions.

As argued by Ostrom (1990), the commons can work and does work. This is even truer for the digital commons where scarcity of material resources is not an issue. When everything is available to everybody we do not have to worry much about human selfishness. Therefore the conclusion is straightforward: If the digital commons can work, it needs to be supported. It is vulnerable, however, as it develops unevenly. Thus we have to think about ways that support especially those areas of the digital commons that so far remain underdeveloped.

Throughout the last century, labour has been analysed in the western hemisphere as wage labour only. It was a common perception that there was just no alternative to wage labour. Obviously this theoretical orientation was a reflection of an economic reality characterised largely by wage labour as the dominant form of production. However, the perception that there is no alternative to wage labour is increasingly being challenged. Recently, calls for a basic income have gained momentum, which is partly documented and reflected in the journal Basic Income Studies, founded in 2006 with two issues per year.

It is not possible here to outline this debate in great detail. Instead, I want to focus on an argument for a global basic income brought forward by the late Gorz (1999). Gorz is one of the most prominent scholars known for inquiries beyond the wage-based society. He begins his argument with the claim that work has lost its magic. It has lost its magic on the road to post-Fordism. It goes without saying that work during Fordism was all but perfect. In Fordism, work was not a source of social cohesion or social integration.
However, it gave everybody a sense of usefulness and a sense of entitlement.

Those entitlements were not attached to the person of the wage-owner, but to the function the job fulfilled in the social process of production. Never mind what work you do, what counts is having a job. This was the essential ideological message of the wage-based society (56).

In post-Fordism, the ideological message has profoundly changed:

Fear and tremble […] Never mind what you are paid, so long as you have a job […] Be prepared to make any and every concession, to suffer humiliation or subjugation, to face competition and betrayal to get or keep a job, since those who lose their jobs lose everything (56).

In post-Fordism, employment has become a privilege. While we are all taught to think that a wage-based society is all we can hope for, it is in fact already dead. “They persuade us, it is right, normal, essential that each of us should urgently desire what in fact no longer exists and will never again lie within everybody’s grasp” (58).

Gorz goes to great length to demonstrate that the shortage of work thesis is a myth created by capital. Work is not disappearing, what is disappearing is what Marx calls “abstract labour”, labour as a commodity, labour that can be bought and sold in the market. It is correct that capital can not afford it any more to provide secure employment for all members of society. “The actual problem is not a shortage of work, but a failure to distribute the wealth which is now produced by capital employing fewer and fewer people” (72).

As work time ceases to be the dominant social time we need to prepare for a multiactive life. “The issue, in a nutshell, is the development of people’s autonomy irrespective of companies need for it” (74). This means, to give people more rights over their own time. On the basis of this argument, Gorz proposes the introduction of a guaranteed sufficient income for everybody. A basic income should not be understood as a form of subsistence, on the contrary, it is a resource to enable new social practices. The aim is to:

[…] free them from the constraints of the labour market. The basic social income must enable them to refuse work and reject inhuman working conditions. And it must be part of a social environment which enables all citizens to decide on an ongoing basis between the use-value of their time and its exchange value (83).

In his earlier writings, e.g. Gorz (1989), he has advocated a formula that ties a basic income to required periods of time where citizens perform work for the community, for society, and for the general production of wealth. Later (Gorz 1999) he has abandoned this position to promote a basic income that is unconditional. He argues with Marx of the Grundrisse that time has ceased to be a measure for value. In post-Fordism, where work is increasingly immaterial and imagination, creativity, and intelligence turn into the main productive force, the value of labour can not be measured any more. Obviously this is also true for emotional labour. If emotional and affective investment in work is beyond measure its commodification becomes nonsensical.

Obviously Gorz does not refer to the digital commons, his argument is more general. However there is a very straight connection between Gorz references to immaterial labour and to the ‘general intellect’, a term coined by Marx in the Grundrisse, and the digital commons. Whatever is part of the digital commons has been produced with immaterial labour. And most things that are created with immaterial labour, with emotion, creativity, imagination, and intellect, can be made available in the digital commons. This is not just some niche within the real economy, this is the realm where all knowledge production and cultural production can be shared and freely accessed. For this to happen on a large scale, we have to think about policies that compensate contributors and stimulate what is emerging as an economy of contribution.

The digital commons, I have argued, is a new frontier for struggles over commodification. It is a space that enables counter-commodification – not just on a personal but also on a global level. It demonstrates how creative work can flourish without the chains of intellectual property regulations. However, this is also a vulnerable space as it does not flourish evenly, with some areas (in particular the cultural commons and the art commons) remaining rather underdeveloped. The fostering of all parts of the digital commons is a political question. This is about the creation of spaces in which alternative social practices and alternative forms of work can develop in the best possible way. It is a question to be addressed by social movements. With the crisis of capitalist production deepening, there is a real possibility that one day the value of human bonds and the spirit of the gift (Hyde 1979) will outshine the commodity.

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As a founder of the thrivability movement, Jean M. Russell authored Thrivability: Breaking Through to a World that Works and curated Thrivability: A Collaborative Sketch. Her work on thrivability, innovation, philanthropy, and cultural shifts has been highlighted in the Economist, Harvard Business Review, Stanford Social Innovation Review, and Worldchanging. She received an honourable mention on the (En)rich List, as one of the top 200 people of all time "whose contributions enrich paths to sustainable futures."

**Introduction**

Ilofer Merchant coined the expression “the Social Era” to describe the stage of business evolution where organisations with adaptive social flows, capturing value outside the usual organisational structure, outperform their predecessors. This article examines the social design structures that give rise to what are coming to be known as thrivable organisations in which structure is less rigid and more adaptive. The thesis of the article is that thrivability arises from a high degree of individual agency that enables an organisation – loosely defined rather than strictly legally structured – to be responsive both internally and externally and to fully sense the tensions within and outside itself in a way that facilitates purpose-driven innovation. Social Era organisations capture external value by attracting engagement and contribution toward shared purpose, the so defined “Power of Pull”.

Thrivable organisational designs exhibit one or more of the following characteristics: non-centralised decision-making; adaptive systems; and self-governance, all features that have characterised innovative organisation design for several decades, as with the contributions of Ricardo Semler, Peter Senge, and Gerard Fairtlough amongst others. But, while such approaches have usually been inspired by the search for output improvements in the form of zero defects, Taguchi methods, business process and reengineering, and Total Quality, thrivability seeks to decrease waste in the organisational system by capturing the value and benefits of network production. Thrivable organisational designs reflect the new opportunities offered by a networked world and look to take advantage of new ways of working together to facilitate the emergence of anti-fragility in resource-constrained environments.

It will also be argued that Ostrom’s institutionalism encourages an evolutionary dynamic, rooted in polarity management, of evolving tension between creativity and order. From there, the Holacracy One model of distributed emergent organisational self-governance as one possible way of practicing this social philosophy is explored. The article examines the distributed organisational structure and social protocols of several case studies: London Creative Labs, Edgeryders, Ouisharefest, and Peers Incorporated organisation in general, seen as living organisations that foster social change using innovative business models and clear social protocols.

**Power, Polycentricity, and Learning**

The Bloomington School Social Philosophy elucidates two perhaps interlocking philosophies. The first, proposes polycentricity as an alternative to standard political and economic models. Polycentricity, at its simplest level, describes systems as having multiple points of power and decision-making. The second, involves an evolutionary model of social order where the tension of creativity and order play out. Both support self-governance, freedom, and ingenuity. To shift organisational design toward these, we must examine the story we have about how organisations work. As argued in Thrivability, the story or vision of what we believe is possible shapes what we create and what actions we take. The visions we have contain the bounds of what we believe is possible.

“Visions” frame the perception of reality, and different visions imply different analytical approaches. Because the entire Wilsonian approach is based on the notion that “there is always a centre of power […] within any system of government” (Wilson, 1956 [1885], p. 30), the issue of the location and application of power is shaping the focus and the vocabulary of the monocentric approach. The entire exercise comes to be power-centred in
ways that may become extreme and limiting. Choices, decisions, rules, preferences, ideas, values become secondary. They are just inputs or outputs in the power process or, even worse, a “veil” that is clouding the view of “reality” (i.e., power and its workings) (V. Ostrom, 1972, 1991b, 1993b) 2.

If we allow that power might not always be centrally located, a whole new set of possibilities emerges. This movement from single point to distributed points is not limited to the political and social domain described by the Bloomingtong School; rather, in parallel, we have seen shifts toward multiplicity in numerous domains from network science to the humanities emerging in the 1970s and evolving since. This multiplicity leads to interesting insights commonly ignored in group or community design. Amongst these are:

- that people themselves have multiple centres of power and may have antagonistic or cooperative relations with others;
- that we are each a network of identities participating in overlapping networks of communities and groups that some of our roles or identities may give us power while others disempower;
- that our identities only exist in the space or flow between ourselves and others.

The root infrastructure and protocols of thrivable organisational design address this multiplicity with a polycentric approach. In organisations we have witnessed a trend away from organising by function because it is too siloed and difficult to link to organisational output. In its place, there has been a shift toward redesigning organisations by output. Thrivable organisations recognise that there is value in being with domain experts as well as value in associating by output. Thus, as with Holacacy (see infra), we can have multiple centres around which to organise. These multiple points of decision-making and authority do complicate the thrivable organisation, since budgets and authority may need to flow through multiple channels to empower and compensate individuals.

The Edgeryders network offers some compelling examples of polycentricity in practice. The initial impetus for the network came from a project of the Council of Europe and the European Commission on engaging the wisdom of youth and the disenfranchised to provide a voice and communication channel of many to many. It took on a life of its own. Nadia El Imam describes: “A social enterprise, Edgeryders, is building on its experience to provide work that is both paid and meaningful to members of the community – and, the community is open to anyone who wants to be involved. The online community has grown to 1600 members in over 30 countries.”

Edgeryders has organised several Living On The Edge (LOTE) conferences using a bootstrap approach: getting borrowed space, borrowed resources, and enthusiastic collaboration. The online space carefully crafts our work methods, culture, and governance that then attract a diverse collection of self-directed change agents. Bubbling up from the conference comes the idea of finding a space to live that is free of financial cost but paid for by community engagement and support. Thus the unMonastery arose.

“[…] unMonastery wanted to give an organic answer to the local high number of unused spaces, unemployment and the impoverishment of social services, bringing together people who are passionate and dedicated to sharing their expertise for the benefit of the community. UnMonastery is like an artist residency, but for people who want to solve problems in a local community in collaboration with the local inhabitants. Residencies last 1-4 months during which time you work on a personal project, alone or with others. The only criteria is that it acts as a solution to one of the identified challenges and that people in the local community and other unMonasterians get excited about working on it together with you.”

If we look at the network of people engaged in Edgeryders, LOTe, and UnMonastery, there is significant network overlap and yet, in each case, the teams emerge organically as a result of the participating individuals asserting their desire to participate. In an interview with El Imam, she shared:

“Communities with a prospective site can contact the project, sharing the details of the physical location itself, the needs and assets of the community, and what support can be offered. The location must accommodate at least 10 individuals and be minimally liveable, electricity, shelter, water and internet; but may be in need of work to improve it. Potential members are then matched to that offer based on availability and fit to the conditions, and the site can begin to become a reality.

“Members commit to up to 18 months of involvement at any one time, and each new unMonastery site begins by gaining an understanding of what the community needs. The running and conduct of internal and external activities is guided by best practice accrued by the unMonastery project network, but is ultimately autonomous, selected by the members in that location.

“At the end of each 18 month cycle of the unMonastery, the local community is consulted as to what should happen next. Perhaps the activities begun will be continued in the hands of the local people alone, or new ideas have begun to develop for a new wave of activities.”

Polycentricity enables multiple sites of decision-making, preferably as close to the impact of the decision as possible. Edgeryders does not require
that a given unMonastery get approvals from the core of Edgeryders. Instead, the local community has collective decision-making authority with the participants in the unMonastery at that location for what is done there. Only the process of governance and criteria for participation are created by the original organisation. For Edgeryders, decision-making and action are always being pushed out – and pulled by participants – to the edges and away from the core. Yet complete anarchy is avoided by having clear process for engagement and clear purpose for coming together.

Thrivable organisational models also often decrease waste in the organisational system, capture the value and benefits of network production, and demonstrate anti-fragility in resource constrained environments.

**Network Production**

Ton van Asseldonk has been developing an argument on network production efficiency. He distinguishes between craft or capacity production, which is where an individual makes something alone, creating each of the parts and putting them together; and factory production where many individuals each specialise on a part and place it into a whole in turn. In network production, an interconnected collective of people innovates and builds together. Threadless, the t-shirt design company, serves as an example of network production. The shirts are factory produced but the designs are sourced from the community rather than paying a small set of graphic designers to create designs for the shirts. Ton compellingly shows how capacity systems fail to produce at the rates that factory production systems do and, moreover, that, given the need for variety, network production outperforms factory production under conditions where there is a need for variety, say when we need to have 10,000 variations. We can consider this volume of variations to be a form of ‘customisation’ that factory production models can handle, but the cost of searching for solutions and testing them and then providing them quickly outweigh the benefits.

Let’s take Etsy as an example. If a manufacturer wanted to produce the extreme variety that is available on Etsy, the costs of that variety of production would not be outweighed by efficiencies of scale in production. Etsy enables capacity (craft) production to a scaled-up market with low search costs. Still, this is not the full networked production model. Full network production model is more like Buzzcar, a company founded in France by the creator of Zipcar in the US. Rather than having company cars provided for members, Buzzcar connects people who want to use a car with those who have cars. Leveraging a network of people who own cars already drastically cut the operating costs as they don’t have to buy and maintain cars, leveraged the excess capacity in the cars that owners had but were not using all of the time, and captured an immense amount of variation – the ability to provide cars in locations that Zipcar couldn’t have made profitable and to provide a variety of car types that Zipcar couldn’t have offered, as efficiencies of scale in car purchasing limit the different kinds of car available. Buzzcar operates as a network production system in similar ways to many of the sharing economy or collaborative economy businesses – leveraging excess capacity for low cost by mediating exchange through internet software that reduces transaction costs to next to nothing.

Furthermore, network production models tend toward high resilience. Prime examples of the Social Era, Peers Incorporated models capture value of a collective of interconnected people outside the organisational boundaries. With few or no assets on the books – cars they own, rooms to build and maintain, products to keep in stock – they adjust rapidly to shifts in the market. Robin Chase, Zipcar founder, argues in her Peers Incorporated talks, and forthcoming book, that these organisations marry the best of corporations and collective individuals as they can get the financing, insurance, and software that large corporations can leverage while also capturing the sense of community, variety/customisation, and localisation that corporations, using factory production models, cannot.

Chase describes the Peers Incorporated concept as:

“Resource efficient, flexible, resilient, innovative, personal, and high growth. The Peers Incorporated structure delivers the power of the corporation while retaining the creative, local, and unique strengths found in individuals — just what our rapidly transforming world demands.”

Robin Chase expands on this in talks she gives around the world:

“Big companies (institutions and governments) use their inherent strengths – the ability to make long and large investments, marshal teams with many kinds of expertise, extract economies of scale, apply standard forms of interaction – to create platforms for participation. These platforms make the complex simple and put the full power of the company into the hands of the autonomous participating peers (and small companies). The peers in turn provide what is in the nature of the small and expensive for the large – localisation, customisation, specialisation, and access to social networks – almost all of which is offered under the economics of excess capacity.”
Network production can be one path to increased anti-fragility. Taleb coined the anti-fragility term as the antonym to fragility, since even the word robust does not speak to the ability to get stronger when a system is perturbed. This is extended by International Futures Forum’s use of the term ‘bounce beyond’ to describe the resilience of anti-fragility in place of the conventional aspiration simply to bounce back. When the options space is tightly contained or limited, an organisation may have focus but also becomes brittle, reducing its capacity to respond, rapidly or at all, to shocks to the system. However, network production takes full advantage of variety, maximising the option space and increasing the ability to route around what does not work and quickly innovate and build upon what does work.

OuiSharefest and the OuiShare network demonstrate this anti-fragility with surprising grace and coherence. “OuiShare is a think and do-tank with the mission to empower citizens, public institutions and companies to create a collaborative economy: an economy based on sharing, collaboration and openness, relying on horizontal networks and communities […] Started in January 2012 in Paris, OuiShare is now an international leader in the collaborative economy field. A non-profit organisation which has rapidly evolved from a handful of enthusiasts to a global movement in 25 countries in Europe, Latin America and the Middle East, our network of 50 expert “Connectors” engage over 2000 members and contributors worldwide.”

Promoting their first event to my own network, I learnt that they did not have very many women speakers and brought this feedback to the organisers. Having done the same thing at numerous events, I was shocked at their response. Usually organisers defend and resist, placing blame elsewhere. OuiSharefest organisers invited me to join the program committee and took my guidance seriously. This is anti-fragility at work – a disturbance and opportunity for bad press turned upside down into participation and advocacy. More than this, once engaging with the core, I discovered that this was not an isolated incidence but was built in to the very DNA of the organisation. They had a clear project management system that enabled broad, open participation. People coming from outside the original core were encouraged to take on responsibility for the improvements and additions they wanted to bring to the event. Not only did this leverage a great deal of ‘free’ talent that was passionate and committed to excellence and innovation, it also scaled the event rapidly. The challenge when quick scaling can be ‘how to maintain coherence?’ The core original organisers established a strong culture of design, play, openness, and vision that enabled those attracted to it to join and participate. Where and how to engage was clearly visible and permission to take the next action was simple and straightforward. Using this strategy around the topic of sharing increases coherence too, since the vision is aligned with the method of participation and amplifies the shared principles through ongoing practice.

Building on anti-fragility principles, thrivable organisational design enables and depends on ongoing learning. The second important social philosophy coming out of the Bloomington School creates an evolutionary dynamic where the tension and movement between two opposing forces models this enablement of learning.

The argument is shaped by a bold ontological assertion that choice is the basic and defining element for both humans and the social order they create. Choice – loosely defined as being able to consider alternative possibilities and to select a course of action from among a range of such possibilities – is not only a fundamental part of human behavior, but also the source of social order and social change. From an evolutionary standpoint, choice could be seen as a particular form of selection: alternative possibilities are assessed and compared. […] Yet, argues V. Ostrom, the cycle of adaptation does not stop there: organisation solves problems but also creates new problems. Humans have to adjust to them through learning and new choices.

Each step forward may also have unintended consequences. So even as we create a solution to an existing challenge, the solution often creates a new challenge. Given that these tend to be complex adaptive environments, we cannot just keep performing slight variations of our experiments to find the best practices. Rather, the first experiment changes the conditions for the second, and, as Dave Snowden writes, the best we can do is to find “emergent practice.”

Where the Ostroms did not speak in terms of explicit “polarity management” they set it up as two poles in tension. Barry Johnson explains in Polarity management: Identifying and Managing Unsolvable Problems that we vacillate between two, or more, poles in tension, each pole offering positive characteristics and negative ones depending on where we are in the cycle.
The Ostroms place innovation on one side and order on the other. When we are threatened by tyranny or constrained by order, we seek to innovate and benefit from creativity to transcend the limitations of tyranny and order. However, innovation and creativity can also lead to chaos, making it difficult to navigate and cooperate (entropy). Then we create rules and order to level up our ability to navigate the uncertainty of creative chaos. Yet what creates order will slide into the tyranny of order over time (disentropy).

Let us take a step further with a brief look at such two key challenges: the “threat of potential chaos” and the “threat of tyranny.” […] The future course of human development is always influenced by the generation of new knowledge. New knowledge opens new possibilities; and challenges more often than not the status quo – it has destabilising effects. Increasing the potential variety in human behaviour, the multitude of combinations, combinations of combinations and patterns of interactions, threatens with chaos the maintenance of a predictable order (V. Ostrom, 1982, p. 18)17.

To sum up, social order and its institutional dynamics are seen as being shaped by, and operating under the shadow of the ongoing tension between the “threat of chaos” and the “threat of tyranny.”

If a society accepts that all decision makers are fallible, then it recognises the need to create institutional bulwarks against error. That is to say, it responds to the necessity of reducing error proneness by building “error-correcting procedures in the organisation of decision-making processes” (V. Ostrom, 1982, p. 32; 1973, 1990). These error-correcting procedures are nothing else than organisational and institutional processes aimed at facilitating and speeding up the rate of learning. Learning is the quintessence of error-fighting mechanisms. Correcting errors is part of a learning process. In this respect, systems of organisation, including systems of government, can ultimately be viewed as arrangements that either facilitate or stifle opportunities for learning to occur (V. Ostrom, 1982, pp. 31-32; 1973; E. Ostrom, Gardner, & Walker, 1994)18.

Self Governing and Navigating Tensions

There remains a tension between human error and the inbuilt inconsistency error of rules. Rules arise to address specific issues and at some point reach a conflict with other rules. So we navigate between the fallible judgment of individual humans and the fallible use of rules applied to complex situations. To design to minimise error resulting from both, we use rules to govern where and how the adaptive complexity of human judgment needs to be applied. Social systems designed for self-governance do not require a centralised decision-maker or mediator for tensions. Instead they create processes for all involved to evolve the terms of interaction over time. Holacracy offers one such model for enabling self-governance.

While the other case studies here show models of small-scale distributed governance, the Holacracy model has been used with larger-scaled organisations as an antidote to the efficiencies lost by the bureaucracy usually required to manage large numbers of people. In Holacracy, the structure of the organisation is emergent. It emerges from the combination of Roles, with associated Purposes, Domains and Accountabilities, that evolve over time and in response to conditions.

Holacracy begins with a core document stating the constitution and then builds out in a very polycentric way the working groups needed to fulfil the organisation’s purpose. Where many organisations attempt to silence tension, Holacracy brings tension to the table. A tension is seen as a tell-tale of potential growth and evolution, as a by-product or emergent property of the organism evolving and growing in its environment. Meetings are created by the voicing of a tension and have clear and rapid process for taking action on those tensions. Sociocracy is the non-trademark version of Holacracy.
I interviewed the founder of Holacracy One, Brian Robertson, to ask about how these tensions play out in organisations.

“We can so easily get stuck in our head, designing everything up front without enough data about what is actually happening. We can over-design. So what Holacracy does instead is not about designing the perfect organisation up front. Instead, allow the organisation to respond – it is an evolutionarily designed algorithm - to adapt over time. […] The fuel for Holacracy is tensions – wherever you perceive a gap - where we could be and where we are and the distance between the two is a tension. It is a stretching. Most organisations ignore that. The system doesn’t support them into processing that tension into meaningful change. Holacracy’s goal – Any tension sensed by anyone anywhere in the company has somewhere to go that can get rapidly and reliably processed into meaningful change as long as it is relevant to the purpose of the organisation. The whole system is designed to have channels and flows to process those tensions. That forces clarity.”

LEARNING SYSTEMS

After Sofia Bustamante had been studying the Grameen microfinance model in the field, and both she and Mamading Ceesay had engaged in years of innovative social change, the two came together to work on London Creative Labs (LCL). In a discussion with both of them, they described LCL as follows:

“As a small startup, we saw urban poverty was rather too large a challenge for us to tackle, so we decided to focus more specifically on disadvantaged people living in social housing who are stuck in poverty due to persistent un(der)employment. Social Startup Labs were designed by LCL as a Grameen-inspired systemic intervention to poverty that both creates new opportunities for work through enterprise and uses that enterprise to address other barriers to employment. The accompanying interventions, such as Skills Camps and Social Startup Incubator, are required to deliver a holistic solution to worklessness.”

LCL is not just a social entrepreneurial endeavour, it is a system entrepreneur organisation. As each programme launched in the community, information was gathered on what worked and what was still needed. Each additional programme added to a system of support that empowered a community with what it most needed – responsively and responsibly. Social Startup Labs helped community members get information on starting their own endeavours. But too many needed to increase their skills, so Skills Camps started for the community to offer career coaching for each other. Startup Incubator helped move start-up ideas into action.

LCL not only provides community support, it also engages people at different phases of development. It has a highly sophisticated model of self-development and leadership that it uses to actively invite and support community members to level up. It uses social impact metrics to quantify and qualify the success of its efforts and engages in continuous learning and adaptation to optimise its social impact.

LCL demonstrates deep thrivable organisational design, it optimises processes to increase agency and build the autonomy of its participants, and it continuously facilitates and encourages decision-making by its participants and allows projects born within its programs to move freely into the world at large; it generates coherence through clearly framed purpose and deep embedded community engagement. LCL listens carefully for tensions, regarding them as opportunities to evolve and improve the organisation in service to its mission. It innovates based on need, creatively reframing problems into opportunities.

CONCLUSION

These elements of organisational design encourage thriveability, not only because the design elements act as structures that promote positive social impacts in resourceful ways that engage stakeholders, but also because the people inside those organisational structures have increased purpose, mastery, and autonomy, described by Daniel Pink27 as the key motivations for people. They often have clear sense of what is expected, how process unfolds, giving participants a sense of social safety without getting lost in rigid bureaucratic, organisational bloat.

The individual satisfaction and sense of choice is, in fact, what makes these structures so effective. Because these organisations use purpose as part of their lure for engaging a social network of participation, they begin to blur the boundaries between business and social change efforts. Additionally, social change efforts leverage business structures and profit models to become more viable in a shifting market operating under tight financial constraints. Thrivable organisation designs, from Peers Incorporated and Holacracy to systemic entrepreneurship, foster individual well being while serving a greater social purpose, filling participants with a sense of meaning in their lives without trapping them in rigid fixed structures that don’t adapt to our quickly shifting environment. Furthermore, they source innovation through diversity of participants in a network, sourcing tensions, or navigating resource constraints.

Thrivable organisational designs tend toward anti-fragility – they bounce beyond when perturbed. Part of this bounce comes from leveraging external resources keeping internal organisational overhead low, some of it comes from accessing a diverse network of participants...
and contributors, and some comes from putting the power of decision-making at the edges, where the impact of decisions is felt and the challenges best understood. They often use clear processes designed for ongoing evolution and learning. They source and navigate tensions and polarities as opportunities rather than threats. Welcome the rise of the Social Era through thrivable organisational design and evolution.

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20 Sophia Bustamante and Mamading Ceesay. (2013). Interview, 12 November.
The Anatomical man.
FOR ALMOST 200 YEARS, THE NATURE OF CONSCIOUSNESS has been largely explored from the assumption that it was an as yet not understood neurophysiological process entirely resident in the organism. Its inherent physicality became a canon. From this materialist perspective moments of genius are genetics and conditioning, spiritual epiphany is delusional, and psychic functioning – or nonlocal consciousness as it should more properly be called – impossible. And yet these three mysterious human experiences have played, and will continue to play, a major role in social change. The experiences of individuals and our reactions to them create the social trends that transform our world. An individual has an insight, it impresses others and, in response their small quotidian acts, individual choices, made in the same time frame create social trends. Think how quickly Gay was supplanted by LGBT, representing a change in the social gestalt. Consider the change in attitude towards marriage equality, or shift in consensus concerning marijuana prohibition in the United States.

The process is most easily seen in religion, where it can be particularly powerful, even though it may be intellectually irrational which emphasizes the emotional quality of these insights at the social level. An individual has a nonlocal consciousness experience which they share. If it finds social acceptance, the interpretation of that nonlocal experience(s) becomes the dogma of a new religion. Joseph Smith and the rise of Mormonism in the 19th century, or L. Ron Hubbard and the growth of Scientology in the 20th are two clear examples of this process.

It may be less charismatic but it is no less powerful in science. Consider the German chemist Paul Ehrlich. The public has forgot his name, even as history and the lives of millions have been profoundly affected by his creativity. He, and the teams he led, were responsible for a long list of pharmaceuticals, including the first synthesis of a quinine substitute, a cure for sleeping sickness, and the most effective pre-antibiotic cure for syphilis. Although he died in 1917, so great was the creative momentum produced by this man that, as historian Henry Hobhouse notes, “In explosives, fertilizers, pharmaceuticals and synthetic substitutes of all kinds the German chemical industry was able to survive defeat in World War I, poor government and inflation in the 1920s, even the slump (The Depression, ed.), largely because of the technological lead derived from Ehrlich and his pupils.”

History tells us that creativity is a broad river flowing through any culture. From our collective mass, with an egalitarian democracy that confounds elites, and breaks through privilege, mothers and fathers seen as the most ordinary folk, bring in souls whose lives blaze like comets through our history. These individuals speak to us from some deep place in our collective psyche and these singular people compel us to transform our world. Illumined moments, whether religious, psychic, creative, or scientific, come to individuals, but their power arises from their social acceptance.

The challenge for science is not to dismiss what the individuals say is happening to them as a delusion or fantasy, but to seek to understand the processes by which they occur, and the domain into which they lead us. It is important I think to learn what we can about invoking this state of consciousness, and nurturing it in our culture. We are going to need a 21st century equivalent of the two bicycle mechanics from Ohio who taught humanity to fly, two young men in a garage creating the personal computer, a lone woman geneticist living above a garage who showed us how part of evolution worked and, three decades later everybody understood what she had seen, and Barbara McClintock was awarded the Nobel Prize.’

We are going to need such people, perhaps as never before. We face extraordinary challenges resulting from climate change, the collapse of anti-biotic medicine,
the breakdown of marine eco-systems and the acidification of the oceans. Projected sea rise that threatens to inundate many of the world’s great urban areas. Drought so severe it will lead to migration. The transition out of the carbon energy era. All this and more will require great genius, and we should learn all we can about nurturing these breakthrough moments. But we are not doing that because we are trapped in a paradigm that, by its nature, cannot consider these experiences for what they are: a change in consciousness, a special state of mindfulness, as described by psychologist Charles Tart, in his classic 1972 Science paper “States of Consciousness and State-Specific Sciences.”

The individuals who have these experiences are very articulate in explaining what happened to them. Although the details vary according to their context – scientific, creative arts, spiritual disciplines, remote viewing – they all share one thing in common: a sense of being connected to a greater unity incorporating everything, a sense of being in a “spaceless space, a timeless time.” They are describing and experiencing an aspect of consciousness not physiologically grounded, nor limited by space and time.

Thomas Kuhn, of the Princeton Center for Advanced Studies, and author of the Structure of Scientific Revolutions, arguably the most important book on the history and philosophy of science in the 20th century, who coined the term paradigm, notes, “No ordinary sense […] fits these flashes of intuition through which a new paradigm is born. Though such intuitions depend upon the experience, both anomalous and congruent, gained with the old paradigm, they are not logically or piecemeal linked to particular items of that experience as an interpretation would be [emphasis added].” He goes on to say, “Scientists then often speak of the ‘scales falling from the eyes’ or of the ‘lightning flash’.”

Brahms says “[…] in this exalted state I see clearly what is obscure in my ordinary moods; then I feel capable of drawing inspiration from above as Beethoven did […] Those vibrations assume the form of distinct mental images […] Straightaway the ideas flow in upon me […] and not only do I see distinct themes in the mind’s eye, but they are clothed in the right forms, harmonies, and orchestration. Measure by measure the finished product is revealed to me when I am in those rare inspired moods […] I have to be in a semi-trance condition to get such results – a condition when the conscious mind is in temporary abeyance, and the subconscious is in control, for it is through the subconscious mind, which is part of the Omnipotence that the inspiration comes.”

Einstein mirrors this same concept “A human being is a part of the whole, called by us ‘Universe,’ a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. Nobody is able to achieve this completely, but the striving for such achievement is in itself a part of the liberation and a foundation for inner security.”

Edgar Cayce, the father of holistic medicine, whose entire career is a study in his ability to open to nonlocal awareness states “In this state the conscious mind becomes subjugated to the subconscious, superconscious or soul mind; and may and does communicate with like minds, and the subconscious or soul force becomes universal. From any subconscious mind information may be obtained, either from this plane or from the impressions as left by the individuals that have gone on before, as we see a mirror reflecting direct that which is before it […]”

The Patanjali Yoga Sutras, which date at least to the second century BC speak at length about moving into nonlocal awareness through meditation. Psychologist William Braud made a particular study of the sutra, notes: “The sixth, seventh, and eighth ‘limbs’ of ashtanga Yoga are dharana (concentration), dhyana (meditation), and samadhi (profound absorption), respectively.”

The Patanjali source refines this further, Braud explains. “The repeated continuation, or uninterrupted stream of that one point of focus is called absorption in meditation (dhyana), and is the seventh of the eight steps (tatra pratiyata ekatanata dhyanam). When these three are practiced together, the composite process is called samyama. Samyama might be translated as constraint; thorough, complete, or perfect restraint; or full control; it might also be translated as communion or mind-poise. Samyama conveys a sense of knowing through being or awareness through becoming what is to be known. Through mastery of samyama comes insight (prajna), and through its progressive application, in stages, come knowledge of the Self and of the various principles of reality (tattvas). With increasing yogic practice come a variety of mystical, unitive experiences, states, conditions, or fulfillments – the various samadhis – along with the attainments or powers (siddhis).”

And Christian saint, Maria Teresa of Avila counsels “This magnificent refuge is inside you. Enter. Shatter the darkness that shrouds the doorway. Be bold. Be humble. Put away the incense and forget the
incarnations they taught you. Ask no permission from the authorities. Close your eyes and follow your breath to the still place that leads to the invisible path that leads you home". "Follow your breath" a statement a Buddhist could make.

Max Planck, the father of Quantum Mechanics, framed it very clearly in an interview with the respected British newspaper, *The Observer* in its January 25, 1931 edition. He did not mince words: "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". After more that a decade of additional research in 1944, in a lecture in Florence, Italy, Planck doubled down on his point. "As a man who has devoted his whole life to the most clear headed science, to the study of matter, I can tell you as a result of my research about atoms this much: There is no matter as such. All matter originates and exists only by virtue of a force which brings the particle of an atom to vibration and holds this most minute solar system of the atom together. We must assume behind this force the existence of a conscious and intelligent mind. This mind is the matrix of all matter."

In spite of the words of Planck, Einstein, Brahm, Catholic saints, Hindu masters and, so many others, the men and women who have changed our lives, the current prevailing model of consciousness is entirely physiological. It posits:

**The Physicalist/Materialist Model**

1 - The mind is solely the result of physiologic processes;
2 - Each consciousness is a discrete entity;
3 - No communication is possible except through the defined physiologic senses;
4 - Consciousness dwells entirely within the time/space continuum.

The problem with this model is that it conforms to neither the observed experimental data, nor the words of the people who have had the experiences. So what do we know about the process by which these experiences happen?

There are clearly neurophysiologic correlates. Beginning in 2003, and continuing with a shifting list of collaborators, cognitive neuroscientist Mark Jung-Beeman at Northwestern University has step-by-step sought to understand the neurobiological process of insight: the aspect of consciousness that solves problems. To study this he has used fMRI and an innovative protocol. He places participants in the instrument and gives them a puzzle that cannot be worked out with the intellect alone. From his research he concludes, "We observed two objective neural correlates of insight. Functional magnetic resonance imaging revealed increased activity in the right hemisphere anterior superior temporal gyrus for insight relative to non-insight solutionsicular cortex (DLPFC) and anterior cingulate cortex (ACC)." The research has reached a point where it constitutes a new sub-discipline: neurotheology.

It is also important to note another correlate: nonlocal perturbation, consciousness directly affecting material reality at a distance. It can be clearly seen through direct observation as well as statistics in Jeanne Achterberg’s very elegant therapeutic intention study. As she describes it, “Each healer selected a person with whom they felt a special connection as a recipient for Therapeutic Intention. Each recipient was placed in the MRI scanner and isolated from all forms of sensory contact from the healer. The healers sent forms of (TI) that related to their own healing practices at random 2-minute intervals that were unknown to the recipient. Significant differences between experimental (send) and control (no send) procedures were found (p = 0.000127). Areas activated during the experimental procedures included the anterior and middle cingulate area, pre-cuneus, and frontal area. It was concluded that instructions to a healer to make an intentional connection with a sensory isolated person can be correlated to changes in brain function of that individual.”

But it clearly is not just neurophysiology, as that is usually understood. A new sub-discipline in biology, Quantum Biology, has emerged in the last decade that takes the physical to its limits. Life through this lens is a molecular process; molecular processes operate under quantum rules. Thus, life must be a quantum process. Experimental evidence is beginning to accumulate that this quantum view of life processes is correct. U.C. Berkeley chemist, Gregory S. Engel, led a team that ingeniously found a way to directly detect and observe quantum-level processes within a cell using high-speed lasers.

In early 2012 a team led by Neill Lambert at the Advanced Science Institute, RIKEN, and Yueh-Nan Chen of the Department of Physics and National Center for
Theoretical Sciences, National Cheng Kung University in Taiwan, published a meta-analysis review of the Quantum biology literature to that date. Their conclusion: “Recent evidence suggests that a variety of organisms may harness some of the unique features of quantum mechanics to gain a biological advantage. These features go beyond trivial quantum effects and may include harnessing quantum coherence on physiologically important timescales.”

This work is of enormous importance because it is building step-by-step to the most refined quantum physicality. But even its most ardent exponents recognize it has not given us the fullness of the mind. It has not answered what CU Smith of the Vision Sciences Laboratory at Aston University calls the ‘hard problem’ – the neural correlates of consciousness (NCC). Smith examined “the work of prominent modern investigators: J.C. Eccles/Friedrich Beck; Henry Stapp; Stuart Hameroff/Roger Penrose and David Bohm and their attempts to show where in the brain’s microstructure quantum affects could make themselves felt. Smith reluctantly concluded that none have neurobiological plausibility.”

Neuroscientists Jeffrey M. Schwartz and Mario Beauregard, working with physicist Henry Stapp, have also recognized this: “Neuropsychological research on the neural basis of behaviour generally posits that brain mechanisms will ultimately suffice to explain all psychologically described phenomena. This assumption stems from the idea that the brain is made up entirely of material particles and fields, and that all causal mechanisms relevant to neuroscience can therefore be formulated solely in terms of properties of these elements. Thus, terms having intrinsic mentalistic and/or experiential content (e.g. “feeling,” “knowing” and “effort”) are not included as primary causal factors. This theoretical restriction is motivated primarily by ideas about the natural world that have been known to be fundamentally incorrect for more than three-quarters of a century [emphasis added].”

In my view, it is the new medical sub-discipline of Resuscitation medicine that is finally going to push science into a new paradigm, more consistent with Planck’s observations.

In the beginning Near Death Experience (NDE) studies were all retrospective, people recounting experiences that had happened to them while little or no monitoring was underway, sometimes decades after the fact. These accounts were riveting, and the recurring elements common to so many of these subjective experiences was notable. The child studies by a team led by paediatrician Melvin Morse were particularly compelling because the children were too young to be knowledgeable about near death.

Then Dutch Cardiologist Pim van Lommel led a team that took the research to another level. They published a major prospective study in a major medical journal, *The Lancet*. In this prospective study, they included “[…] 344 consecutive cardiac patients who were successfully resuscitated after cardiac arrest in ten Dutch hospitals.” They covered every variable they could think of “[…] demographic, medical, pharmacological, and psychological data between patients who reported NDE and patients who did not (controls) after resuscitation.” Of the 344 patients in the study 62 (18%) reported NDE, “of whom 41 (12%) described a core experience.” The study became longitudinal and they followed up both groups and compared the data two and eight years later.

Through all of this skeptics have been able to argue the dying brain model. In August 2002, neuroscientist Dean Mobbs, of the British Medical Research Council, Cognition and Brain Sciences Unit, and Edinburgh University Senior Lecturer Caroline Watt published a paper in *Trends in Cognitive Sciences* saying “Taken together, the scientific evidence suggests that all aspects of the near-death experience have a neurophysiological or psychological basis: the vivid pleasure frequently experienced in near-death experiences may be the result of fear-elicited opioid release, while the life review and REM components of the near-death experience could be attributed to the action of the locus coeruleus-noradrenaline system. Out-of-body experiences and feelings of disconnection with the physical body could arise because of a break-down in multisensory processes, and the bright lights and tunneling could be the result of a peripheral to fovea breakdown of the visual system through oxygen deprivation. A priori expectations, where the individual makes sense of the situation by believing they will experience the archetypal near-death experience package, may also play a crucial role.”

But medicine has not stood still. Resuscitation Medicine, is now a specialty community large enough to sustain its own journal, eponymously titled Resuscitation. It is one of the ironies of science that these physicians, completely dedicated to understanding the physical organism as it enters death, and closely monitoring the process, and bringing about the successful resuscitation are presenting evidence that challenges materialism in a most fundamental manner. To begin with they are working in a time frame unlike anything seen in human history. Resuscitations are occurring after up to six hours and, by their success, taking science to the limits of physiological consciousness and into the domain of the nonlocal. The patients treated by these medical teams are monitored with a precision impossible
even five years ago. Yet patients at approximately the same frequency of occurrence as in past studies are still describing classic NDEs, and are providing testimony concerning objectively verifiable events that occurred while they lay “dead” on the operating table. Against this level of monitoring and knowledge of brain function the opioid arguments against the reality of NDEs appear crude and unsatisfying.

There is another issue as well. As medical staff become more aware of NDEs and medicine becomes ever more sophisticated, more NDEs cases show up. In the US over 13 million people, about 4.2% of the American population, has reported having experienced an NDE. And the number is almost certainly larger since many people don’t speak of their experience to medical personnel. Still, 13 million is lot of people. It also follows that out of those millions some will be prominent. Republican Illinois Senator Mark Kirk claims that while recovering from a massive stroke in the right side of his brain at Northwestern Memorial Hospital’s Intensive Care Unit in Chicago, he was visited by three angels – who asked him, “You want to come with us?” To which he replied matter-of-factly, “No, I’ll hold off.”

So for reasons of breakthroughs in scientific research and changes in social gestalt, we are reaching a tipping point. I believe it is time to think about consciousness in a new way, giving primacy as Planck proposed. Two corollaries flow from his assertion: first, is the existence of Nonlocal Consciousness, an aspect of consciousness independent of space-time and not dependent on physiology. Second, as the Therapeutic Intention/healing research shows it is possible for a healer holding a strong intention – whether for good or ill – to have an effect on another organism, even though separated by distance or time, from single cell organisms to high order mammals suggesting that all consciousnesses are interdependent, and interconnected.

Wolfgang Pauli, another of the 20th century’s physics immortals saw it this way: “It is my personal opinion that in the science of the future reality will neither be ‘psychic’ nor ‘physical’ but somehow both and somehow neither.”

In the next generation, physicist Oliver Costa de Beauregard observed, “Today’s physics allows for the existence of so-called ‘paranormal’ phenomena […] The whole concept of ‘non-locality’ in contemporary physics requires this possibility.” From this perspective a new model of consciousness emerges:

**THE INTERDEPENDENT INTER-CONNECTED MODEL**

1. Only certain aspects of the mind are the result of physiologic processes;
2. Consciousness is causal, and physical reality is it manifestation;
3. All consciousnesses, regardless of their physical manifestations, are part of a network of life which they both inform and influence and are informed and influenced by: there is a passage back and forth between the individual and the collective;
4. Some aspects of consciousness are not limited by the space-time continuum.

I have written extensively elsewhere about the quality of the evidence for this Interdependent Inter-connected model. There are at least six double-blind randomized and stabilized protocols being carried out in laboratories around the world, by dozens of researchers, whose odds of occurring by chance are one in a billion or better – six sigma. These careful studies, as revealed by meticulously structured protocols all confirm this about consciousness: it is both local, sited in the physiology of the body, and nonlocal existing independent of the body, and this aspect is not limited by space or time. Is this work to be trusted? I have also discussed the quality and nature of the critical review of this research literature elsewhere in several papers. Here I will just say, these studies have been exhaustively critiqued, and the results still stand.

All of this research plus the study of the biographies, autobiographies, diaries and papers of the men and women who have these nonlocal experiences, particularly those that produce technological breakthroughs suggests that there is a pattern to the process. One of the things that distinguishes the creative master from people who are just smart may be that those known for their creativity work out their own way of invoking this pattern. The techniques they use may vary, but there are six major components to the pattern that seem to be common to all.

**1 - INTELLECTUAL EXCELLENCE**

Whether it is physics or sculpture, creative masters are first of all masters in their field, thinking visionaries. Yet this does not mean necessarily that they are the smartest people. The linkage of creative genius and high I.Q., is nowhere near as strong as many seem to believe. It may, in fact, be largely irrelevant in a field such as painting. Even where it would seem to be crucial its role seems problematic. Physicist Richard Feynman, Nobel Laureate (1965), best-selling author, and one of the most influential scientists of the post-World War II world, says he snuck into his college’s office to get a look at his file, and learned that his I.Q. was only 124. Superior, certainly but, if I.Q. were the only...
determinant, there was nothing in his to indicate a historically significant genius. This is not just an anecdotal conclusion. If I.Q. were the defining attribute of genius there ought to be some kind of consistent measurable relationship between I.Q. and the occurrence of genius. To see if such a relationship really exists, the first thing required is to know how many people have really high I.Q.s.

Paul D. MacCready, an engineer by training, is considered by many to be a genius; he is best known as the "Father of Human-Powered Flight" for designing and building the Gossamer Condor and Gossamer Albatross. MacCready is also fascinated with the nature of genius, and he took the time to work out a calculation on the prevalence of high I.Q. individuals33. He assumed that intelligence was normally distributed across the planet (it doesn’t actually seem to be, but the difference here is not significant), and that each nation had the same ratio of smart, average, and dumb people as every other nation.

He started with the world average I.Q., which is 100, and decided that for his analysis a genius would be someone whose I.Q. was at least 14534. This works out to be the top 0.13 per cent of the human race. As MacReady points out, that’s a subgroup so rare you, the reader, may never personally know someone with an I.Q. that high. Yet as rare they are, in a world population of seven billion human beings that still means more than nine million of us – 910,000,000 – are geniuses, if that is defined as having an I.Q. of 145 or greater. And, given that the planetary population increases by 228,000 humans every 24 hours35, that means that 29,640 girls and boys with I.Q.s at this level are added every day. So if you define genius by I.Q. there are lots and lots of geniuses, even if you don’t personally know one. Yet this way of looking at genius can’t be right. It can’t even be correct in terms of creativity generally.

How many geniuses can you name? Don’t restrict yourself to only those living now, make it easier, and take the last 5,000 years of history as your time frame. Well, you might start, there’s Einstein, Leonardo, Blake, Mozart, Picasso – typically known by you by one name – but after 15 or 20 names it gets harder to add to the list. If you are like most people you will end up with less than 100 names. If over nine million individuals are alive today – let alone the millions and millions of men and women with I.Q.s of 145 or better who have lived during the past five thousand years – and most of us can name less than 100, obviously something besides just high I.Q. is necessary to become a genius. Put another way, if high I.Q. were the only thing needed, then MENSA, the organization that selects its membership on the basis of high I.Q. – their threshold is only 132 – ought to be filled with the leading geniuses of our time. It is not. Its membership is filled with obviously bright, often interesting and eccentric, frequently likeable people, the great bulk of whom work in quite ordinary jobs, leading anonymous lives just like their neighbours who have much lower I.Q.s. Intelligence as the single dominant factor fails as an explanation to genius, and even less impactful forms of creativity.

In 1871, Charles Darwin, enormously famous and recognized for the genius of his work, wrote his son a letter in which he tried to puzzle out the mystery. “I have been speculating” he said, “what makes a man a discoverer of undiscovered things; and a most perplexing problem it is. Many men who are very clever – much cleverer than the discoverers – never originate anything.” Darwin’s choice of gender words reflects the bias of his time, but his fundamental point is as valid today as it ever was.

We should not, however, make the mistake of confusing creativity with enlightenment. Many creative masters are not very stable or functional in other parts of their lives. Gauguin may have been a great painter but he was a man tortured by fears and anger. Picasso, by the accounts of all who knew him, was often not a very nice man. It is not required that creativity and desirable character traits be linked. What does seem to be important is that creativity is in some way a function of focus. Focus can be achieved either through neurosis (an obsessive focus) or through a dedicated consciously-assumed focus (as in any of the martial or meditative arts). Perhaps because, as a culture, we do not provide effective and systematic training to achieve creative vision, when it does manifest itself it is often clouded by neurotic focus.

Nikola Tesla, for example, was one of the towering figures of early 20th century science, yet his fear of germs led to his demand that everything on his table be sterilized, and that at least two dozen napkins be placed next to him when he sat down to eat37. What produces such an imbalance? Why do many geniuses cling to debilitating idiosyncrasies? Perhaps, without consciously understanding the relationship they are afraid that if they give up their obsessions they will lose their focus, and thus their creative powers.

2 - THE DEEP KNOWING THAT A SOLUTION TO THE CHALLENGE DOES EXIST

Mastery of one’s field is critical for a second reason; it is a precursor to knowing (as opposed to believing) that a solution exists. As Einstein explained it, “I feel certain I am right while not knowing the reason”38."
This knowingness could be described as a “leap of faith.” It is an act of trust. Creative masters may be filled with doubts about the other parts of their lives, but about the wellspring of their creativity they all seem to have a sense of trust. Creative breakthroughs are not just re-combinations of known elements (although they may be that as well), but genuine ground breaking insights, and it does not seem possible to attain them without this sense of trust and without the courage to make that leap of faith from the known to the unknown no matter the cost.

3 - Strategies of Inward Looking

It is essential to develop some technique of inward looking – some way of connecting with that aspect lying beyond the purview of the intellect. Here again the ability to focus, to hold intentioned awareness, is a central factor. Historical accounts and laboratory research both suggest that meditation, gardening, even sports such as darts, can provide a way of looking beyond the known horizon.

Given the commitment to do so, could we, in fact, develop training processes, which would create the conditions for a creative breakthrough? I believe we can and that the place to start is with the psycho-physical self regulation techniques practiced in meditation and some mindfulness training.

Over a 1,000 papers were published on Meditation in the peer-reviewed literature just between 2006 and 2009. There is not one meditation literature, but multiple branches to this literature in several disciplines, from physics to pastoral. Much of the research focuses on stress reduction, sleep problems, and attention issues. But in the context of opening to nonlocal consciousness and the creative pattern, I want to concentrate principally on the emerging evidence on the lasting effects meditation has on our neuro-anatomy, particularly our brains and, even here I am only going to focus on the research of the past few years.

By 2004 it was already well-established that electroencephalogram patterns of meditators were different than non-meditators. But the question was: did this mean there was enduring fundamental change in the brains of meditators? To answer this question a team at the Psychiatric Neuroimaging Research Program, Massachusetts General Hospital in Boston headed by Sara Lazar, used MRI to scan the brains of long-term meditators and matched controls, including the prefrontal cortex and right anterior insula. Between-group differences in prefrontal cortical thickness were most pronounced in older participants, suggesting that meditation might offset age-related cortical thinning. Finally, the thickness of two regions correlated with meditation experience. These data provide the first structural evidence for experience-dependent cortical plasticity associated with meditation practice.

In 2009, at the Center for Functionally Integrative Neuroscience, at Denmark’s Aarhus University, Peter Vestergaard-Pulsen led a team seeking to explore the effects of long term meditation on brain structure. They found, as they report in their paper in Neuroreport: “Using magnetic resonance imaging, we observed higher gray matter density in lower brain stem regions of experienced meditators compared with age-matched nonmeditators. Our findings show that longterm practitioners of meditation have structural differences in brainstem regions concerned with cardiorespiratory control. This could account for some of the cardiorespiratory parasympathetic effects and traits, as well as the cognitive, emotional, and immunoreactive impact reported in several studies of different meditation practices.”

Half a world away and a few months later that same year a research team at the Laboratory of Neuro Imaging, Department of Neurology, UCLA School of Medicine publishing in Neuroimage reported: “[...] meditation practice has been shown not only to benefit higher-order cognitive functions but also to alter brain activity. Nevertheless, little is known about possible links to brain structure. Using high-resolution MRI data of 44 subjects, we set out to examine the underlying anatomical correlates of long-term meditation with different regional specificity (i.e., global, regional, and local). For this purpose, we applied voxel-based morphometry in association with a recently validated automated parcellation approach. We detected significantly larger gray matter volumes in meditators in the right orbito-frontal cortex (as well as in the right thalamus and left inferior temporal gyrus when co-varying for age and/or lowering applied statistical thresholds). In addition, meditators showed significantly larger volumes of the right hippocampus. Both orbito-frontal and hippocampal regions have been implicated in emotional regulation and response control. Thus, larger volumes in these regions might account for meditators’ singular abilities and habits to cultivate positive emotions, retain emotional stability, and engage in mindful behavior. We further suggest that these regional alterations in brain structures constitute part of the underlying neurological correlate of long-term meditation independent of a specific style and practice.”
The work of Yi-Yuan Tang of Dalian University of Technology in China and Michael Posner of the University of Oregon will end my short survey. Their work confirmed once again that meditation literally changes one’s brain. In the *Proceedings of the National Academy of Science* in August 2010 at the University of Oregon 45 volunteers were assigned to either an integrative body-mind training (IBMT) for meditation or a control group that did only a relaxation program42. In scanning the brains of both groups after training they found that the brains of those individuals who engaged in the IBMT form of meditation showed greater change than those who just used a relaxation technique and that: “[…] 11 hours of IBMT increases fractional anisotropy (FA), an index indicating the integrity and efficiency of white matter in the corona radiata, an important white-matter tract connecting the ACC to other structures. Thus IBMT could provide a means for improving self-regulation and perhaps reducing or preventing various mental disorders43.”

Natural sleep also plays a role. Lloyd Osborne, who wrote *Ebb Tide* with Robert Louis Stevenson, author of *Treasure Island* and The Strange Case of Dr. Jekyll and Mr. Hyde, quoted Stevenson as saying that he went to sleep asking, “the gremlins of my mind to write a story while I slept44.” Physician and researcher Dr. Jonas Salk said something similar “Intuition is something we don’t understand the biology of yet, but it is always with excitement that I wake up in the morning wondering what my intuition will toss up to me, like gifts from the sea. I work with it, and rely upon it. It’s my partner45.” Salk is reported by *Fortune Magazine* editor Roy Rowan as crediting this technique in guiding him to make the correct leap that led to the discovery of the polio vaccine46.

Perhaps the most ironic example of dreams as a part of the pattern is the account of René Descartes. On Saint Martin’s eve (November 10th) 1619, in Neuberg, Germany, he had an experience, which led to what he called “a wonderful discovery47.” From it he formulated “a marvelous science,” a worldview whose hallmark was its commitment to the primacy of the intellect; a view which has dominated how technological cultures have thought about the world ever since. What was this wonderful experience? It was that most non-intellectual of events: a series of three dreams or visions.

The technique used to achieve intentioned focused awareness does not seem to matter. From intense stress to meditation, anything that creates this single pointedness facilitates opening to the nonlocal aspect of consciousness. But understanding the dynamics of the nonlocal experience itself holds substantial promise for learning how to create these states and use them in a practical manner. Recently research was published on the effects of meditation on the four roughest San Francisco city schools point the way.

Twice a day a gong sounds in the classrooms for what is known as “Quiet Time.” *San Francisco Chronicle* education reporter David Kirp who witnessed it said “I’ve spent lots of time in urban schools and have never seen anything like it48.” The gong sounds and the students all sit quietly, eyes closed, and hold the focused attention to clear their minds and release anger and negative emotions.

In 2007 the city’s Visitacion Valley Middle School became the first public school nationwide to adopt this Quiet Time program. Visitacion is situated in a neighbourhood where gunfire is so frequent it is routine background noise. Nine shootings were reported in this one neighbourhood from mid-December to mid-January 2014. Almost every child sitting in the school’s classrooms knows someone who has been shot. Or they themselves have been shot. Murders are so frequent the school feels the need to employ a full-time staff grief counsellor.

Kirp describes what has happened over the seven years the program has been in operation: “In years past, these students were largely out of control, frequently fighting in the corridors, scrawling graffiti on the walls and cursing their teachers. Absenteeism rates were among the city’s highest and so were suspensions. Worn-down teachers routinely called in sick. Now these students are doing light-years better. In the first year of Quiet Time, the number of suspensions fell by 45 percent. Within four years, the suspension rate was among the lowest in the city. Daily attendance rates climbed to 98 percent, well above the city-wide average. Grade point averages improved markedly. In years the program has been in operation: “In years past, these students were largely out of control, frequently fighting in the corridors, scrawling graffiti on the walls and cursing their teachers. Absenteeism rates were among the city’s highest and so were suspensions. Worn-down teachers routinely called in sick. Now these students are doing light-years better. In the first year of Quiet Time, the number of suspensions fell by 45 percent. Within four years, the suspension rate was among the lowest in the city. Daily attendance rates climbed to 98 percent, well above the city-wide average. Grade point averages improved markedly. About 20 percent of graduates are admitted to Lowell High School – before Quiet Time, getting any students into this elite high school was a rarity. Remarkably, in the annual California Healthy Kids Survey, these middle school youngsters recorded the highest happiness levels in San Francisco49.”

Perhaps it is not surprising then that a significant body of research has grown up since the early 1970s, showing that there is a strong correlation between explicitly linking meditation to successfully completing a task that can only be done by opening to nonlocal consciousness60. There are dozens of papers exploring this correlation, and it is the single clearest indicator of nonlocal task success61. Why? Because meditation develops the discipline of holding intentioned focused awareness, which is the skill required to open to nonlocal awareness.
A surcease from intellectual struggle must occur in order for the breakthrough to take place. One must reach the eye of the intellectual hurricane, a place of peace and assuredness, in order for the moment of breakthrough to occur. By their reports individuals say surrender leads to the kind of inner-listening associated with creativity – just as intellectual command allows inner-listening. Einstein said he “saw” Relativity in a moment while he was walking through the woods beside Lake Silvaplana\(^1\) Tesla’s invention of the electric motor, at the end of the 19th century came, he said, during a walk across a city park\(^2\). The French mathematician Jules Henri Poincare told friends that on two occasions major breakthroughs seemed to come “from thin air”\(^3\). Einstein said he “saw” Relativity as he idled away time in a canoe after an illness\(^4\). He would later write: “I believe in intuition and inspiration […] Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution”\(^5\). Research suggests that there is a 10-20 second “window of intuition” which then closes down as intellectual analysis overrides direct perception of the intuitive images.

In remote viewing, one of the six explicit nonlocal consciousness protocols, a viewer is asked to provide their sense perceptions describing a person, place, or object from which they are isolated by reason of time or space or both. Researchers very early on discovered that to “fix” these short-lived evanescent moments so that they remain available to memory, one of the easiest and best ways to do so is to make a simple drawing\(^6\). Looking at the target drawings made in laboratory Remote Viewing experiments, the comparison with the doodles made by scientists as they attempt to translate their interior images into a formal expression they can share with colleagues is irresistible. In both instances the drawings, even after interruptions, can be used to refocus on the insight.

Once the moment of illumination has taken place, the conscious, analytical, and synthesizing intellect comes back into play. Descartes gives a clear example of the process when he says that after his dream it took him the rest of his life to make that vision intelligible to others. Nietzsche says he “saw” the story of Zarathustra in a moment, but took months to write out his vision\(^7\). There is the necessity to winnow the valid inspirations from the erroneous ones. This, too, requires the special skills of the intellect.

One of the most intriguing things about these descriptions, other than their uniformity, is the uncanny resemblance they bear to reports in parapsychology, the one discipline that studies rigorously controlled intuitive events. When, for example, ordinary people are asked to carry out an intuitive task, known as Remote Viewing, which involves the ability to describe persons, places or events from which one is physically or temporally separated, and about which one could not know through normal sensory or intellectual channels, in debriefing sessions which follow such an experiment, participants frequently say about their intuitive experience that “I kind of space out,” or “it’s sort of like focusing my mind at some middle distance”. They describe the moment itself by saying, “it came in a flash,” or “it was like a hologram.” “Images are all there […] as if it were a hologram hanging in my mind.” Indeed, so strong is this aspect that Arthur Koestler coined the term holons to deal with this inpouring of comprehension\(^8\).

We know the creative breakthroughs are real. We live in the world they create. New technologies, new symphonies, new paintings come into the world. One of the strange things about these moments of illumination is that they often occur in more than one person in near concurrence. Alfred Wallace and Charles Darwin have similar insights in near concurrence. Edison was not the only person to solve the problem of making a functional light bulb, only the first to get a patent. This simultaneity is so marked that it is almost as if the collective mind of humanity was pregnant with the idea and gave it birth in several places to assure that at least one birth would survive. This suggests German polymath Adolf Bastian’s (1826-1905), theory of Elementargedanke – literally “elementary thoughts of humankind” which so influenced
physicists like Planck, Wolfgang Pauli, and Einstein – indeed much the German school of physics which was dominant in the early decades of the 20th century leading up to WWII – as well anthropologists like Franz Boas, the father of American anthropology, and physicians such as Carl Jung. The idea of the collective unconscious – Jung’s term for the nonlocal domain – was the way he expressed it. It proposes a worldview in which all manifestations of consciousness, regardless of the complexity of their physical forms, are part of a network of life. A network in which each component both informs and influences, as it is informed and influenced.

It is worth noting that even if the selective criterion is “the bottom line”, there is clear evidence of a direct correlation between intuitive functioning and creative decision making in business. Douglas Dean and John Mihalasky of Newark Institute of Technology carried out a series of experiments involving 385 Chief Executive Officers of American corporations\textsuperscript{62}. The task required of the CEOs was to precognitively predict 100 randomly selected numbers. The results were then correlated with the financial report of the corporations. In every experiment a positive correlation was established between financial performance and high precognitive functioning – a correlation sufficiently strong that Dean was able to examine financial reports and predict how the CEO of that corporation would do in his number predicting experiment. Prophets, he found, make profits.

If one thinks of social policy from the physicalist model each consciousness is isolated and the Earth is a dead resource to extract or dominate. Consciousness has no real role. We live on that Earth largely isolated from Earth’s meta-systems unless the weather is bad. In contrast from a perspective of consciousness being of primary importance in an interdependent and interconnected matrix of life. It becomes clear that we don’t live on the Earth, we live in the Earth, cantered in a cocoon that extends several miles below the Earth’s surface and far above us. Spacecraft experience atmospheric effects beginning 75 miles out (120km). And beyond that lays the protective veils of the magnetosphere. We are embedded in a vast interlocking system in which consciousness plays a powerful role. From the perspective of this matrix, wellness at every level from individual to planetary suddenly becomes the most desirable state, and of primary importance. Profit must be made within a life-affirming parameter. Science’s socio-metrics have become sufficiently sophisticated and precise that we can say that, based on reliable objective measures, the compassionate life-affirming choice is the best one\textsuperscript{65}.

I believe we are now living through a fundamental change in human consciousness, not just technology, but a fundamental change in social paradigm. It has happened before. As precedent consider what German psychiatrist and philosopher Karl Jaspers (1883-1969) called the Axial Period, roughly the eighth to second century BCE, and mostly cantered in the two centuries from 800 to 600 BCE. In that historically small time period most of the world’s great pre-Christian religious movements and philosophical lines developed. Confucius (555-478BC) and Buddha (567-487 BC) were almost exact contemporaries as was Zoroaster, according to the best approximation, as well as Lao Tzu, founder of Taosim, and Mahavira, who is the most probable founder of Jainism. In the Middle East the line of monotheistic prophets, which began with Amos of Tekoa midway through the eighth century, reached its culmination near the end of the sixth century with Deutro-Isaic Judaism. At this same time, in the Northern Mediterranean the Greeks were experiencing the birth of philosophical speculation with the work of Thales and his successors. And in Athens democracy was established\textsuperscript{66}. Human consciousness changed.

I believe we are facing a change of that magnitude, one whose outcome is still labile, but whose outcome is certain. Our survival depends on understanding that life is interconnected and interdependent, and that we must work with the great meta-systems of the Earth. The question is not whether we will change, but how much pain we must inflict upon ourselves before we make the choices that are compassionate and life-affirming, leading to wellness from the individual to the planetary. Understanding the creative pattern including the nonlocal aspect of consciousness component will make this transition easier.

\textsuperscript{5} Idem: 121.
\textsuperscript{8} Cayce E. Reading #3744-3. October 9, 1923 (Virginia Beach, Va.: Archives of the Association for Research and Enlightenment).


Interview with Max Planck, The Observer, January 25, 1931.


Idem. His actual calculation was “three standard deviations above average.” In this instance, one standard deviation is 15.


Charles Darwin (1871). Letter to his son Horace as reported by Erasmus Darwin, 1915, 2: 207.


Idem.


Ibid.


Idem.

Wallace R. K. (1971). *The Physiological Effects of Transcendental Meditation*, doctoral diss. UCLA (Grant NIMH 2-T01 MH 06145-12, 19). See also Ramakrishna Rao and H. Dukan. *Meditation and


The month of March (detail).
Adebayo Akomolafe (PhD) is a clinical psychologist, lecturer, speaker and author. He currently teaches in Covenant-University, Nigeria. Bayo is an international figure and poet-activist for a radical paradigm-shift in collective human experience. His is an emerging voice in the world calling for a multi-dimensional shift in consciousness by turning to each other in small ways. Bayo and his ‘life-force’, Ej, are currently on an enchanted journey of decolonization. He is writing his second book And We Shall Dance with the Mountains: Subversive Journeys at the Edges of a Planetary Future. Ej and Bayo are ecstatic parents of a girl, Alethea-Aanya — their mentor.

As a Post-2015 world draws closer, an unspoken awareness is speedily gaining prominence: not only have the Millennium Development Goals (MDGs) failed to translate into a more equitable state of things for people across the world, but there is now some admission that even if they did we still wouldn’t have achieved a world our hearts feel is possible. In a sense, what is feasible is no longer desirable. We have seemingly come to the logical ends of our institutional quests for a better world, and the echoes of systemic disillusionment are deafening. However, silhouetted by perpetuated narratives of cruel optimism and the political compulsion to never lose hope is an amorphous, invisible planetary revolution that somehow transcends the utopian politics of hope and reaches through current paradigms of knowing and being — connecting with the impossible. In this essay, I write about a different kind of politics that is animating these consciousness shifts — not one of hope, but one of a radical element: ‘surprise’; this politics of surprise — a sustained intimacy with not-knowing, with our shared disenchantments, with a radically different conception of the cosmos, and with a rejuvenated sense of humility and ‘positionality’ in a universe that is no longer passive and dead, but sensuously alive — is largely informed by reanimated indigenous wisdoms, paradigm-bursting research into quantum realities, and local experiments with ‘neighbouring’ and gift-sharing. More importantly, this transitional politics is the non-dualistic reclamation of our poetic affinities with darkness as the source for ‘new’ moments — a Promethean reification of ‘lostness’ that is becoming a powerful movement for deep change.

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One day in 2012, I found myself precariously perched atop the buzzing engine of a run-down commercial motorcycle. As we drank in miles with reckless abandon, I felt with an urgent keenness every inch of the journey, every overworked bolt on the old machine, and all the reasons why I was most certainly out of my mind. The motorcycle’s rider, my companion and interpreter, had no qualms juicing it for all it was worth — if only to meet the next appointment I had made with another Yoruba shaman in a nearby settlement.

Hours earlier, I had sat before a middle-aged albino man with bloodshot eyes and a sinister smile. He called himself ‘Whiteman’. He was a traditional practitioner in dark crafts, in the art of healing people of their many mental and physical ailments without the instruments that make modern healthcare seemingly indispensable. I had come to him, wet-nosed and out of my depth, to inquire about alternative worldviews about mental health and mental illness. Unable to string together a meaningful sentence in my own indigenous language, Yoruba, I had hired a local ‘gatekeeper’ to help interpret my questions and, in turn, translate my intervie- wees’ responses. ‘Whiteman’ was, however, unlike the other traditional healers I had already interviewed and related with. There was something unnervingly threatening about him. He guffawed at all my questions — as if to emphasize how utterly ignorant I was. At one point during the interview, after my rudely persistent questions about local experiences and meanings of mental distress, he even threatened to make me mad. I wasn’t sure if I believed he could do it, but I wasn’t willing to persist any further. His apartment had all the trappings of the sacred. There were however no crosses, no rosaries or leather-bound texts. In their stead were snail shells, cow horns, little glass bottles with leaves stuffed inside...
them, and cobwebs seemingly connecting them all. These items somehow co-created an otherworldly atmosphere, granting the musical intonations of the Yoruba-speaking shaman the added quality of being prophetic – so that when he told me the psychiatric industry could not address his people’s problems, he sounded as if he were singing the lyrics to a tune I somewhat recognized but no longer remembered.

As we rode on through bushes, through dusty stretches of broken asphalted roads, shrouded by a setting sun, I could already make out the contours of a powerful realization dawning in my mind. I managed to scrawl quick notes and new questions in my diary as we pierced through the twilight-stained landscapes. The journey itself seemed to be writing along with me – suggesting strong themes that would later guide my interpretations and report. By the time I had interviewed the sixth healer, I was already fully saturated with the meaty entrails of a subversive idea: there is much more at our disposal than the systemic impasses of orthodoxy might suggest. There are wilds beyond our fences.

The chords of triumph echoed in city halls across the globe: finally, the world had won its protracted battle with all its pestilent ills. Well, at least, we were firmly on the path towards the emerald city, gleaming with seductive irre sistibility. We had a map, our column of fire to guide us towards Canaan. It became incredibly powerful, not to mention being politically correct, to speak about ‘championing the Millennium Development Goals’, because they summarily represented the genius of political imagination, the necessity of bureaucracy, the raison d’être of big money and technological innovation. We were going to eradicate poverty by lifting most people in the developing world from the below-one-dollar-a-day pits; we were going to help every girl-child get to school, enjoy a good education, and have a fighting chance at life; we were going to save the environment.

The mighty gears of modern agency roared to mechanical life in obedience to their ‘new’ directives. More money was released to close the statistical miles between where we were and where we hoped to be by 2015. In my country, Nigeria, the MDGs spawned a small pseudo-industry of ghost-NGOs with organizational objectives carefully stated to demonstrate compliance with the lofty goals of the United Nations. The pregnant clouds had congregated above our heads, and everyone was about with little baskets to catch as many drops of rain as they could. Who could blame them? It was free money – and everyone was equal under the clouds. Naturally, those with more larger, more sinewy baskets were more equal than the rest. Silhouetted by national quests for debt cancellation, local government officials and professional ‘activists’ were often the first to really benefit from global aid and the perfect storm of sympathy that invaded our borders. Behind tear-inducing, heart-churning photographs of malnourished children were simple get-richquick schemes that siphoned money towards where it naturally gravitates – more money. In the peripheries of the social orgies the Goals had inadvertently made happen were villages, peoples and communities that didn’t have a clue.

But of course there was bound to be critical flaws in how the Goals were pursued. The MDGs weren’t a papal decree or, less impressive, a divine ordinance. They didn’t come equipped with infallible strategies. Moreover, there were many instances in which far-flung communities were successfully reached by white-tee-shirt volunteers with vaccines and flashy leaflets about the relative joys of abstinence or the haunting dangers of not using condoms. Slowly, the averages began to rise in Nigeria as well as in other parts of the world, vindicating the heavy investments of former years. In about a year from this writing, the MDGs would have come full circle – expiring at the marble doorsteps whence they first walked out into the world, not having been fulfilled. There will be grim pre-meetings and countless committees and reports trying to make sense of the last 15 years. There will be fiery debates about better data measurement tools and more sensitive indicators. Drowned in tsunamis of numbers and words, the Assembly will make calls for more effective leaders to champion the inevitable Post-2015 goals. But when those Goals walk down those marble steps, they will walk into a world significantly different from the one in year 2000. Back when the MDGs were first articulated, there was no YouTube, no Web 2.0, and no

**THE MILLENNIUM DEVELOPMENT GOALS**

In the year 2000, at the United Nations’ Headquarters in New York, 189 nation-states pledged to achieve a series of goals by the year 2015. The goals, ranging from eradicating hunger, achieving environmental sustainability, giving every girl and boy primary education, reducing child mortality and improving maternal health, and developing a global partnership for development, represented a critical moment in modern history. Designed to galvanize intergovernmental agencies, civil society organizations, and the private sector, the Millennium Development Goals (MDGs) promised to usher in the long-awaited age of prosperity, technological innovation, peace and health for all that had seemed to elude the modern project.

The MDGs walk down those marble steps, they will inevitably sound as if he were singing the lyrics to a tune I somewhat recognized but no longer remembered. They didn’t come equipped with infallible strategies. Moreover, there were many instances in which far-flung communities were successfully reached by white-tee-shirt volunteers with vaccines and flashy leaflets about the relative joys of abstinence or the haunting dangers of not using condoms. Slowly, the averages began to rise in Nigeria as well as in other parts of the world, vindicating the heavy investments of former years. In about a year from this writing, the MDGs would have come full circle – expiring at the marble doorsteps whence they first walked out into the world, not having been fulfilled. There will be grim pre-meetings and countless committees and reports trying to make sense of the last 15 years. There will be fiery debates about better data measurement tools and more sensitive indicators. Drowned in tsunamis of numbers and words, the Assembly will make calls for more effective leaders to champion the inevitable Post-2015 goals. But when those Goals walk down those marble steps, they will walk into a world significantly different from the one in year 2000. Back when the MDGs were first articulated, there was no YouTube, no Web 2.0, and no
The improvement in national averages has failed to account for the downward trend for those in the margins. Beyond this however, there seems to be other compelling reasons why the MDGs not only failed to translate into lasting change where they presumably matter, but why we cannot afford to tether our hopes for a more beautiful world to the new UN goals that are bound to emerge in 2015.

For one, the engines that drive global finance and big corporate agendas, which ensure ordinary folk are drained of their agency, are the same forces the proponents of MDGs rely on to fulfil their objectives. Money as interest-bearing debt has always been the central mechanism at the heart of the global dynamics of change. In order to service these debts, giant corporations will have to convert the commons into commodity – stripping the people of what is otherwise freely available to them. The MDGs were not designed to critically address the paradigmatic issues at work in global monoculture. The Goals are reductionistic attempts to address problems that were created by the very tools they employ.

Global aid, political leadership, infrastructural expansion, rampant consumerism, trickle-down economics and Western dominance will not summon the transformative moments we collectively seek. We invented the modern ethics of philanthropy and poverty eradication to escape the need to change a money system that is fuelled by the very existence of poverty and scarcity; we created an industry of ‘waste management’ that tempers our anger and numbs us to the fact that we abide in a cradle-to-grave, use-and-dump global economy – a behemoth that necessarily forces the proponents of MDGs rely on to fulfil their objectives. Money as interest-bearing debt has always been the central mechanism at the heart of the global dynamics of change. In order to service these debts, giant corporations will have to convert the commons into commodity – stripping the people of what is otherwise freely available to them. The MDGs were not designed to critically address the paradigmatic issues at work in global monoculture. The Goals are reductionistic attempts to address problems that were created by the very tools they employ.

The problem of poverty did not ‘exist’ until we introduced a monetary framework that reified scarcity, valorised ownership and celebrated property accumulation; the problem of waste was invented by the system that pretends to address it; ignorance wasn’t certified until schools were invented; and, the health of our ecological systems will always be an issue – so long as we continue to perpetuate a civilization whose very foundation is the idea that ‘nature’ is a resource to be exploited for our fanciful whims.

The MDGs are well-intentioned, just as treating malaria with a hot cup of tea is well-intentioned – but not...
A PROMETHEAN DARKNESS

Over the past three years, I have been privileged to relate with communities, countercultural groups, spiritual gatherings, artists, scientists, and prominent academics and thought leaders who suspect that what is possible is no longer worthwhile. In a way, what these voices are collectively emphasizing is that the presumably sensible thing to do is actually counterproductive. Their claims are not trivial, but inspired by a ‘new’ vision that celebrates the interconnectivity between all things, the profound mystery of consciousness, and the power of ‘ordinary’ people to create a more beautiful world. What these persons and groups are affirming – oftentimes with different languages and narratives – is consistent with what is probably the most disturbing discovery of our times: reality is illusory.

Of course, to say that nothing is real (or its parallel: everything is real) is sure to draw the ire of physicists who feel very strongly that New Age philosophies have hijacked interpretations of quantum realities to legitimize their woo-woo claims. I do not write in defence of any of those claims in particular (neither do I think they need defending) – even though I find some of them very interesting. However, what many interpretations of quantum dynamics are evincing is a world that is quite unlike anything we imagined or could imagine. The Cartesian maps that fostered cognitive territories marked by scientific rationalism, patriarchal dominance and empirical materialism are proving to be unable to explain how two entangled atoms separated by vast distances could communicate with each other – almost as if there were no space between them. When Einstein learned of entangled particles, he derogatorily referred to the situation as ‘spooky action from a distance’. In his world, there were rules that could not be contravened. One of them was that information cannot be transmitted faster than the speed of light. So when quantum entanglement broke that immutable pre-condition for physical reality, Einstein was seemingly beside himself.

But that is only the tip of an iceberg the size of a continent. Prestigious experiments in clairvoyance, dream telepathy, psychokinesis, remote viewing and other anomalous forms of knowing are chipping away at the monument that extolled the singular gift of sentience to our reputed separation from ‘nature’. Of course, the reason why more people are not exploring these topics is because they are too disturbing to the dominant ethos, established monotheistic religions and knowledge systems that thrive on the myths of scarcity, separation and salvation. Imagine what would happen if
What he said may not have sounded practical or meaningful to a generation in search of new foundations; yet, the deeper implications of what the shaman said – and what seems consistent with many other indigenous wisdoms – is that darkness creates the alchemical conditions necessary for deep transformation, and only by losing one’s way can we find the rich treasures hidden in the dark. Of course, by darkness I mean silence, uncertainty or not-knowing, and apparently negative emotions like grief and fear. Silence, for instance, is more potent than we realize. Elizabeth Lloyd Mayer, in her book *Extraordinary Knowing*, wrote compellingly about how conscious silence makes anomalous ways of knowing possible, because as we relax our cognitive defence mechanisms, the floodgates of our apparently bounded minds become receptive to information from a cosmos that is playfully alive. Researchers in extrasensory perception (ESP) have reported significant results in experimental situations that measured how often participants correctly guessed, say, figures and patterns on upturned cards. Mayer scrutinized entire libraries of reports like these that showed that the results obtained could not have been due to chance or flawed experimental designs. Something was indeed happening – and silence made room for it.

But one of the most fascinating reports compiled in the late Mayer’s book is the personal account of her daughter’s missing harp and how conventional institutions were no good locating the prized item. Mayer, a celebrated psychologist, had almost given up when she, prodded by a friend, decided to try unconventional methods. Desperate, she called up a dowser, whose practice she found weird and ridiculous. How was it possible for anyone to find anything by swinging forking sticks? Perhaps, not surprisingly, the dowser correctly located her daughter’s harp while sitting far away in a different state in America.

The *supernormal* ability to locate missing objects across vast distances – just by concentrating – is consistent with one interpretation of quantum dynamics, which posits that locality, time and space are *biocentric* secretions – not having any reality of their own. *Here is there, this is that,* and past is future – all wrapped up in an enchanted loom of paradoxes and possibilities. Perhaps the most pressing inference we can make about a cosmos without absolute cardinal points and about a civilization fixated with maps and directions is that we are already where we want to go. *We are already home.*

What if a politics of surprise is based on this very premise – that we are already home? We would not dedicate so much energy trying to arrive at a promised future; instead of maps that simplify the territories, we would...
create decadent frescos of presence on the canvases of our shared experiences. We would lead expeditions into the nuances of our experiences, diving deeper into what once was difficult to notice in the first instance. The incredible corporate drives to achieve the Millennium Development Goals would give way to people-centered, contextually relevant platforms that explore our wealth, challenge our truths, and initiate new conversations about what is possible.

It may be impossible or even undesirable to describe everything a politics of surprise entails – mainly because it has no definite form or strategy. At heart, it represents a turning to one another, a challenge to the ongoing program of urbanization, rationalization and systematic exploitation, and a possibility to emancipate ourselves from the manacles of modern civilization.

*The month of February* (detail).
Uffe Elbæk, entrepreneur, educator, activist, writer and Member of the Danish Parliament. In 1991 Mr. Elbæk founded The KaosPilots – International School of New Business Design & Social Innovation, and was the principal of the school from 1991 to 2007. In November 2001 and again in 2005 he was elected to the City Council of Aarhus (Denmark’s second city) for the Danish Social-Liberal Party. He stepped down as city councillor when he was hired by the City of Copenhagen as the CEO of the World Outgames 2009, a position he held from 2007 to 2009. In 2010, Mr. Elbæk founded the consulting company Change The Game with focusing on leadership training skills, political campaigning and social innovation concepts; served as the special advisor to the leadership team at the KaosPilots and as an academic adviser for the HKICC Lee Shau Kee School of Creativity in Hong Kong. In the same year, he accepted to run for the Danish Social-Liberal Party in the upcoming national election for the Danish Parliament. In 2011 he was voted in to The Danish Parliament and was Minister for Culture from 2011 to 2013 and, in 2013 he founded the new entrepreneurial green party The Alternative. Mr. Elbæk is on the board of several Danish and international organizations, and is the recipient of numerous honours and awards, ranging from ambassador for the local premiere league football club AGF to Knight of the Dannebrog. Currently, he lives in the heart of Copenhagen with his partner Jens.

**Interview**

Sahlan Momo: What is your take on the current global political stage?

Uffe Elbæk: My response is shaped by the point from which I view the world: from my home in Denmark. Due to this perspective I most likely miss out the various cultural and social aspects around the world. That goes as well for the political picture that is very different and variegated, depending on the size of the country and the way people react on the social challenges they are facing. In Greece, the social and political opposition has taken the shape of a political party – Syriza, whereas in Latin America we see a new wave of cooperative movements and businesses, especially in Argentina.

That being said, in my perspective I currently see two main tendencies in global politics facing from opposite directions.

On one side, there is an ‘Americanization’ of the political system with only two political fractions, like the Democrats and Republicans. This version can be simplified even further, because while there are two political factions there is only one economic school: the Neoliberal where there is a very unfortunate symbiosis between politics, media and big business. It is remarkable how similar the political picture is in the United States, Russia and China despite how different their political lives appear on the surface.

On the other hand, I do see a tendency pointing to the opposite direction. Luckily a series of hopeful new political initiatives are sprouting everywhere driven by a grassroots and networking mentality that capitalizes on the vast possibilities of activating and empowering an audience through social media. Social media allows political movements to reach out to an audience that has not been politically active, or even motivated, before. The political dialogue ranges from the everyday local difficulties or challenges – unemployment, corruption, and environmental issues – to more complex structural concerns like ‘liquid democracy’ or questioning of the current economical paradigm.

This counter movement is not limited to Europe – it is global. Everywhere from the Tahrir Square in Cairo to the Takzim Gezi Park in Istanbul, the Compass movement in London and the mentioned corporative movements in South America.

Together with a group of people in Denmark, I have recently launched a new entrepreneurial green party, Alternativet (The Alternative), aiming at achieving a higher degree of transparency, dynamism and straightforwardness in our policy development process, inviting all interested stakeholders to participate in the course of action. The ambition is to become an international political platform containing party, movement, think-tank and education. As of now, we have launched the party and put the seeds of the movement, and we are building on international connections and collaborations.

I believe that the simultaneity of the political counter movements growing all over the world is a result of
the societal problems reaching a depth and urgency that forces us to think and cooperate across sectors and national borders. New technological platforms allows for this cooperation to happen.

We are entering a phase where the current political system is distancing further apart from the citizens because of its negative symbiosis with the media and big business. On the other hand, we have a whole new set of political initiatives and ideals locally and nationally anchored but with a global perspective. Never before has the political scene been this interesting and full of possibilities.

SM: What implies your innovative vision, and how to move on from here?

UE: I believe the time has come to build a ‘bridge of democracy’ between the traditional political systems – be it Parliament or City Councils – and the surrounding society. We have to find a way to facilitate a place or platform where the traditional policymaking process and the new and often network-based political initiatives can meet.

In Alternativet we have drafted how this ‘bridge of democracy’ could take form. We reach out to all the people who don’t ‘usually identify with traditional political parties. Six percent of the Danes are members of a political party, which means that apparently 94 percent don’t find it meaningful enough to join a political party. These figures are not to be mistaken with the 94 percent of the Danes not being politically active, they have chosen instead to channel their commitment to society in other ways than through the traditional parties. Supporting local projects and initiatives is a good example of a commitment that some find more meaningful. This shift from traditional parties to focus on specific political cases, like Greenpeace and Amnesty, has been an ongoing process in Denmark, it has been happening for at least 20-30 years because is simply more appealing to back a strong political case than to join a party.

I am no stranger to the feeling that it is hard to buy into ‘the full package’ when joining a political party. Oftentimes – dependent on the situation and case – we will find ourselves agreeing more with another party than the one that we are a member of. Our judgments depend more on the context. I believe this to be one of the main reasons because less Danes want to join a political party. It is hard to accept the fact that we have to compromise our own integrity because our political identity belongs to a party.

Of course it is not possible to be a member of different parties when voting the Alternativet political programme. But why not allow members of other political parties to contribute to the policymaking process? This is why we welcome members of other parties to join our policymaking sessions; the only requirement being to agree to Alternativet’s core values and main political direction.

Besides welcoming non-members, Alternativet is also experimenting with a brand new digital ‘open source’ model for online debate on important political questions, a way of allowing people contribution even if they cannot be physically present to our political laboratories.

Never before a political dialogue has availed itself of such a dynamic. It has been indeed rewarding to see how many people want to partake in our political conversations, and really inspiring to witness the openness and creativeness of these discussions. It is a work in progress, though. One of our learned lessons out of this open process is that, to be effective, is of the utmost importance to have clear guidelines for what is up for discussion and what is not. And for Alternativet, the core values and the political direction are not up for discussion; but the specific policy in the different political themes certainly is.

This is not just a Danish experience, when Alternativet was launched in November 2013, in England and Portugal parties with the same motivations got underway. There are differences in the political programmes, but the common denominator is obvious: the ambition to create a more transparent and dynamic political culture. As a result, Alternativet is currently having talks with political environments and think tanks in Sweden, Italy and the United Kingdom to create common ground and cooperate in promoting a more progressive political agenda in our region of the world.

It is extremely exciting and challenging at the same time: we are up against a well-established political system that may feel threatened by the existence of Alternativet. We need to find a way to navigate in a political system where zero sum thinking is the norm, a system where change – even the necessary – is always seen as a threat to the political establishment.

SM: Which will be Alternativet’s possible sustainable outcomes?

UE: Alternativet’s values are kind of a paradox. On one hand, we want to partake in an equal and respectful cooperation with the other political parties in the country. One of the ways to do so is by sharing the knowledge we obtain in our public political laboratories. On the other hand, we do realize that we have entered a world where privacy is king.

Contrary to a lot of organizations and business models which have already realized that sharing knowledge is paying off, traditional politics is still defined
by zero sum thinking and giving rise to a ‘everyone for himself’ mentality.

When examining my own working environment in the Danish parliament I see a place of solitude, backbiting, of personal conflicts, hunger for attention and big egos: definitely not a healthy culture. The question is whether it is possible to change this state of affairs, or is that what the fight for power does to people?

In Alternativet we believe there is a way to change this, we believe that a completely different political culture is not only possible, is a necessity. If not, we will face a huge problem as society as a whole: the trust in politicians will become weaker and weaker, and fewer people will take the democratic responsibility to enter politics. If this scenario will win, no doubt that we will face a total collapse of the political system, as we know it, for the very foundation of a well functioning society is no longer in place.

SM: What do you think should be prioritized to make your policy implemented at individual, social and global level?

UE: It is too early to provide any final answer to this question. Right now, Alternativet’s primary focus is to ensure parliament eligibility at the next election, which requires collecting thousands of signatures before the election. At the same time, we are hosting political meetings and laboratories all across Denmark and, to top it off, we are gathering information on parties and movements around the world that we would like to collaborate with.

This means that 2014 will be an exiting and defining year for Alternativet, in which we have to mobilize on a local, national and global scale. The best way to describe this working method is that we are building an airplane that is already airborne. It is not, therefore, surprising that some organizational turbulence occurs every now and then while still finishing one wing 30,000 feet above ground.

SM: Which, in your view, are the factors preventing or hindering it?

UE: The primary challenge is that there is no one in the political establishment with a desire for Alternativet to succeed. That goes for parties, political experts or even the journalists because Alternativet’s mere existence is a critique of the state of parties and the media today.

I am not insinuating that every politician, expert or journalist deliberately tries to make Alternativet fail, which is not the case. But the way the power is distributed these days makes of necessity those holding power positions to typically want to keep them. It is an uphill battle for Alternativet to change that. That is the reason why we are focused on changing the way we think about politics, and creating a new political culture in, as well as outside of, the Parliament.

There is a growing need for this change in society, and we have reason to believe that this will happen eventually. The problems and challenges we are facing go beyond borders, which is why the solutions will need to do the same.

Simultaneously, the individual citizen is to smart, experienced and too knowledgeable to accept political top-down decisions. As humans we wish to be involved, consulted and not in the least to be able to understand the calculations or equations upon which the political decisions are based. If you do not feel seen or heard, if you do not understand the need for change and do not see a position for yourself in the reality of tomorrow then you will intuitively work against it.

That is why there is such a need for a new political culture. A political culture where citizens are really seen and heard, where we understand why sustainable changes are needed, and that there is room for all of us in the future heading towards us.

A new political culture of this kind would remind a lot more about the way in which nature organizes itself. A system where everything is interdependent and where an organism only survives if it is capable of balancing the information it absorbs and the information it provides. The political systems of the future will be a lot more like dynamical, communicating, sharing living organisms than “top-down” controlled machines, which unfortunately is the picture of most political parties today.

But if we are to develop a new and much more dynamic and transparent political culture, then we need to unlearn a lot of things we take for given and, at the same time, we need to learn a lot that will be new to us. For example, we need to unlearn inappropriate patterns of conflict and status while we learn to keep the decision-making open as long as possible. We need to unlearn our urge to live our ego in the media spotlight while learning to think in the “interest of the commons” – also in cooperation with our political opponents. But most importantly: we need to learn to be much better in handling conflicts and differences in opinions since politics is in reality also about wanting different things for the society that we are all a part of. Once again, take Alternativet as an example: we want a sustainable society – both socially, economically and environmentally. The transition from the current neoliberal economy to a far more sustainable and sympathetic economy will logically challenge the current positions of power. This in turn, will cause conflicts and counter reactions. How do we handle such fundamentally and
crucial conflicts in an endowed and constructive way? That is the major political challenge today. Fortunately, we have good examples to learn from. It is obvious to mention South Africa to this respect as they managed to complete a transition from a deeply racist and unjust apartheid system to the current democratic society, a process that very well could have upshot a civil war. But it did not, because they chose a wise and empathic way of handling the conflict. There is so much we have to unlearn and so much new we need to learn, which, by the way, highly demands political leadership. Of all of us.

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* Date of interview: February 2014.
FUNCTIONAL DEMOCRACY: A NEW PARADigm ON GEOPOLITICS IN THE MIDDLE EAST

E L Z A  S .  M A A L O U F

I N T R O D U C T I O N

The Middle East has always been a place of wonder and mystery. People around the world have been fascinated by Middle Eastern culture, from the Babylonians to the Ottomans, and from the colonialis to the era of dictators. The culture has vacillated between ages of stagnation and ages of brilliant innovation. Although the people of the region have contributed greatly to the progress of the world, they have also suffered greatly from an inability to sustain long-term healthy progress. It seems as though the Arab Spring has come and gone, leaving many disillusioned youth at crossroads in its wake. These Millennials who tweeted, Facebooked and YouTubed the revolution from the streets, quickly came to the same realization as their parents and grandparents did, that change requires more than just toppling a dictator.

In order to catalyze sustainable change and healthy emergence for a society, a more holistic and open approach must be facilitated to address the structural gaps that still all the region. Often this requires challenging the existing cultural and social paradigms and the introduction of new models that diffuse polarization, unite historically divided people, and improve the quality of life for generations to come. At the same time, it is imperative that any new paradigm honors the intellectual, religious and cultural heritage while facilitating a resilient form of cultural emergence. Jeffrey Goldstein defines the word emergence in the journal titled *Emergence* as “the arising of novel and coherent structures, patterns and properties during the process of self-organization in complex systems”[1]. This paper addresses the make-up of these complex systems from a new and innovative perspective as they apply to shaping the political future of the Middle East.

B A C K G R O U N D

I am a native of the Middle East, fully immersed in its history, thoroughly familiar with its religious, legal, economic and socio-political practices. I have applied a whole system, emergent approach to my work with international organizations in the region. I have spoken on the subject of a new model for Arab Democracy at the United Nations, the World Future Society and a number of universities. I have also presented several workshops on the subject of social emergence. I have consulted with policy makers, diplomats, and journalists about the approach that I developed for this new and resilient model for governance in the Middle East. The framework detailed here is a summary of my upcoming book *Emerge! The Rise of Functional Democracy in the Middle East*. This Journal is the first publication where the summary of this framework appears.

The principles detailed in my book are based on a concept I call *Functional Democracy*. It aims at reframing the issues of competing political and economic ideologies and introduces a conscious evolutionary platform that is aligned with the values and future aspirations of the people in the region. The framework is rooted in the field of large-scale social psychology and provides a deep understanding of the nature of conflict through the lens of socio-cultural value systems. Once these principles are defined, the framework then offers steps on how to design a functional approach to a whole systems model for building a new political philosophy. This is a new paradigm on politics. These concepts have been field-tested on the ground around the world in places like South Africa, Iceland, and in my own 5-year experience in Israel and Palestine. This is the template on which my organization, The Center for Human Emergence Middle East (CHE Mideast) based its five-year initiative in Israel and Palestine. The case study is detailed after much of the framework is explained.
This article will illustrate how carefully crafted cultural visions lead to transformational changes in education, healthcare, economics and other important areas in the development of Middle Eastern cultures and institutions. At the heart of this new paradigm is the work of three prominent developmental theorists from the field of social psychology:

- Dr. Clare W. Graves, author of the Levels of Existence Theory, which compared a number of psychological and behavioural constructs such as Max Weber, Abraham Maslow, and Jane Loevinger.

- Dr. Don Beck, author of the Spiral Dynamics Theory, which uses a socio-cultural value systems approach, and acts as a scaffolding for multiple other behavioural theories while extending the applications of Graves’s theory.

- Muzafar and Carolyn Sherif and Carl Hoveland authors of Social Judgment Theory which introduced pioneering models on the subconscious sorting of ideas, the attitude scale, and the Assimilation Contrast Effect.

Dr. Beck and I co-founded the CHE Mideast and advanced these studies beyond their academic origins to integrate new insights from real applications into the area of social sciences. At the heart of designing functional governance, and new models for conflict resolution is the recognition that human existence is by nature hierarchical. It requires different solutions for cultures belonging to the different levels of existence. Thought leaders in political philosophy today shy away from considering new ideas on social hierarchies for the fear of offending political sensitivities. Acceptance of these models however, becomes easier once the science behind the framework is understood and the applications prove to provide effective solutions.

The pillars on which the framework of rests are as follows:

THE MEASURABILITY OF CULTURAL VALUES

The measure of values has always been a subjective endeavour. This is not the intent of our approach. In this context, cultural values refer to the deep examination of Graves’ eight levels of human existence known as value systems and their subsequent field applications by Dr. Beck and me. While we acknowledge the fact that all people have the potential to develop high cognitive capacities, our framework examines the limitations that come from existential realities within every society and looks to nurture an emergent habitat that positions the culture for maximum potential. Our developmental programs target the needs of specific value systems from an integral, whole systems approach. It uncovers the reasons why different people and different cultures have distinct value preferences and ways of thinking about politics, economics, life priorities, and an array of other metrics.

In developing Graves’ concepts further, Beck added the word memes to value systems and created the term MEMEs to provide a better analogy of how values spread. The word “meme” is a term originally coined by evolutionary biologist Richard Dawkins. It rhymes with gene and just like a gene that carries the codes that define human characteristics; a meme carries the codes that define societal characteristics, like values, language, religion, philosophy, politics, and economics. Value systems are a hierarchically ordered, always open to change set of ethics, values, preference, priorities and worldviews that define an individuals, a group or a culture. They have a spectrum of meaning for words, expressions and experiences that are crucial at every level of personal and cultural development. Humans evolve in response to existential challenges from their environment and as they evolve into higher levels of existence their preferences, or values evolve with them. As societies emerge to higher levels they develop more complexity that transcend and include the lower levels. After decades of applying our model it seems that the best an enlightened leader can do is move the values of a society up the ladder of development a half step and allow that new level of existence to penetrate the culture over time in slightly more progressive ways. Based on these eight value systems, we have developed tests and instruments that make it possible for researchers to measure cultural preferences and human needs and design programs to meet those needs. It is these preferences that Beck and I use to tailor development programs that are resilient.

The eight levels of human existence identified by our model and the ones I have developed further in my theoretical framework about Functional Democracy are depicted in the GRAPH FACING PAGE.

There is a healthy and unhealthy expression at every level and the higher the unhealthy expression is, the more damaging it can be to a culture’s continued development. Examples of an unhealthy expression of the fifth level political system of strategic and enterprising values are the US and its current political gridlock. The European Union, which is centered in the Sixth level political values of egalitarianism and humanitarianism offers a higher standard of care for its citizens but is not without its unhealthy side. In Europe, it was the egalitarian political values that sought to unite the continent through a common currency, but failed to take
THE BIO-Psycho-Social Map of the Human Experience
The value-systems/Spiral Dynamics framework on the eight stages of development

Second Tier “Being” valueMEMES

TURQUOISE Eighth Level System: Holistic vMEME – starting 30 years ago

- Basic Theme: Experience the wholeness of existence through mind and spirit
- The world is a single, dynamic system with its own collective mind
- Self is both distinct and a blended part of a larger, sometimes whole
- Embracing diversity is everything else in biological alignments
- Energy and information promote the forth’s total environment
- Holistic, intuitive thinking and cooperative alliances are to be expected
- Difference can be integrated into interdependent, natural flow
- Understanding that change and change are natural

YELLOW Seventh Level System: Integrative vMEME – starting 50 years ago

- Basic Theme: Live fully and responsibly what your heart and mind become
- Life is a kindred spirit of natural hierarchies, systems, and forms
- The meaning of existence is valued over material possession
- Reality, autonomy, and personal freedom are the highest priority

“...When man is finally able to see himself and the world around him with clear cognition, he finds it preferable to more pleasant. Visible in unmitigated clarity and demanding of equal, it is impossible to be what he might be and humanize his world. This revelation causes him to leap out in search of a way of life and a system of values, which will enable him to be more than he has been. His values now are of a different order from those at previous levels. They arise from self-choice interest but from the recognition of the meaning of existence and the desire that it shall continue to be.”

Dr. Clare Graves

First Tier “Subsistence” valueMEMES

GREEN Sixth Level System: Communal/Egalitarian vMEME – starting 150 years ago

- Basic Theme: Succeed within the group, not on self and ego, with others the group achieves community
- The human spirit must be freed from greed, dogma, and prejudice
- Feelings, sensitivity, and caring are a prime mold of reality
- Spread the Earth’s resources and opportunities equally among all

ORANGE Fifth Level System: Achieving/Strategic vMEME – starting 300 years ago

- Basic Theme: Set your own agenda and empower others the same way to
- Design and implement system Components in the scheme of things
- Progress by learning from success and setbacks, making best results

BLUE Fourth Level System: Purposeful/Authoritarian vMEME – starting 5,000 years ago

- Basic Theme: Life has meaning, direction, and purpose with predetermined ancestors
- The world is a series of goals and process
- Expressions are a mode of conduct based on endresult

RED Third Level System: Impulsive/Ego-centric vMEME – starting 10,000 years ago

- Basic Theme: Do what you like and do what you want, regardless of
- The world is a series of goals and process
- Sense from self and domination circumstantial to please self or

PURPLE Second Level System: Magic/Animistic vMEME – starting 50,000 years ago

- Basic Theme: Keep the peace and harmony of the tribe’s past values and roots
- The world is a series of goals and process
- Expressions are a mode of conduct based on facts

BEIGE First Level System: Instinctive/Survivalistic vMEME – starting 100,000 years ago

- Basic Theme: Do what you must to stay alive
- Live in nature, and only to survive
- Natural self is highly awakened to sustenance
- Food, water, warmth, sex, and safety have priority
inventory of the value systems of new members as the sixth level system often does in its blind pursuit of equality, and the result is the current European state of financial disorder.

Looking at a surface assessment of governance using these values one can see that Democracy in the US today is representative of the fifth level of values, which is a far more complex form of development than ideas on democracy are in China or Russia. In the Middle East, one could argue that Turkey’s style of democracy is a healthy manifestation of a Fourth-to-Fifth Level political system, while Syria’s oppressive feudal system is an unhealthy expression of the Third Level value system. When it comes to the application of politics to values systems, each of these eight levels can be described as being in one of three conditions: open, arrested, or closed. An open system describes a dynamic culture that anticipates change and adapts well to it like many of the Scandinavian countries. An arrested system has stagnant institutions that may change incrementally but not enough to keep up with internal or external dynamics. A closed system is one that doesn’t accept change and works at blocking input from the outside. The only change possible with a closed system is through a crisis or revolution. The Arab Spring is the undeniable result of people living in a closed system.

Measurable cultural values are noticeable at the personal level as well. In speaking to audiences from different parts of the world, the word peace for example, has different meaning to different people. Peace to Palestinians means ending the Israeli occupation and forming a nation state. To the Syrians today, peace means the ability to secure food for the next two weeks. To a first world audience peace is the reference to the abstract concepts like harmony, inner peace, or sometimes financial security. If one looks for a definition of peace along the spectrum of values, to the first level it means “I stay alive”; to the second level “we are safe”, to the third level “I dominate”, to the fourth level “we have religious or patriotic order”, to the fifth level “let’s make a deal”, to the sixth level “equality and harmony.” To the seventh level “I design systems to ensure that peace works for all.”

As one can see from this simple example, the concept of measurable cultural values generates a dynamic synthesis of actionable data regarding values that inform the design of governance that fits. Functional Democracy upholds the values of the seventh level system, and designs democracy that fits the needs and uniqueness of that specific society. This is what we call a memetically-stratified lens through which we reframe political design and conflict resolution.

In order to get a new and fresh perspective on the challenges that face the Middle East, the region’s political history must be reinterpreted through a memetic lenses. This is where the linearity of the historic narrative is replaced with the complexity of cultural values-systems. When compared to the way non-indigenous development agencies approach change, one begins to understand the importance of replacing the linearity of history with the complex dynamics that drive the development of local cultures. The former seeks to impose a template for rapid non-indigenous change, while the latter seeks to unblock developmental gaps and allow cultures to emerge at their own healthy pace with built-in sensitivities to the content of the local value systems. Our work focuses on determining the existing and emergent values systems of a culture, specifically identifying its unique local expressions.

What follows are examples of substituting value systems complexity for historic linearity:

1. Most historians may view the Ottomans as pioneers of modern governance, but when viewed through the value-systems prism, their rule did more to arrest the emergence of the Middle East than any other. While the Industrial Revolution was leading human emergence under the fifth level value system and empowering the strategic and scientific minds of Western Europe, the Ottomans persisted with the values of “governance by exploitation” of the third level of values, oppressing their subjects under the auspices of maintaining tribal peace, while keeping them in dire poverty.

2. When considering the colonial mandate period, though brief, Westerners introduced a foreign system for governance. The concept of nations is a value of the fourth level system. It artificially mapped national boundaries and forced historically competing tribes to fight for power and control. Throughout Middle Eastern history, local power was vested in the heads of tribes and religious leaders, not in democracy and abstract concepts and institutions. A values systems analysis of the colonial mandates era shows the tribal mindsets weren’t ready for that level of social development, especially when its content was full of Western concepts for nations and democracy.

3. Arab Nationalism, although well meaning, was influenced by intellectual elites who travelled abroad but couldn’t bridge their transplanted political models and connect them to the existential
Functional Democracy & The Eight Levels of Human Existence

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In this newly defined field are the first individuals we seek when we begin our field design projects. Dr. Beck has always emphasized the importance of working with people who have a deep understanding of the society they are working in. It wasn’t till I teamed up with reality on the ground. Although they were natives of the region they didn’t recognize the misalignment of Western political and philosophical thought with an enumerable collection of proud tribes whose values were dominated by history, tradition, and territorial battles. As a concept of the fourth level system Arab Nationalism was short lived as the majority of culture still needed to transition to an essential stage of peaceful tribal and religious co-existence before it was naturally ready for nation states. As a result of failed Arab Nationalism, dictatorships dominated the region. These were the values of an unhealthy third level system whose brutal tribal leaders were provided with hollow institutions and the global recognition to rule over other tribes and sectarian groups using the values of brutality and bloodshed that defined their past. If the colonialists were to use a value systems approach to designing democracy, the appropriate form of governance for most of the region would have been a benevolent monarchy that picks a respected monarch among the tribes who becomes their servant leader while building the institutions of the fourth level system over time with the input of his subjects. This is what Functional Democracy calls the “half-steps strategy.” These are just a few examples of how Functional Democracy reframes politics in terms of evolving systems of social and political models. It designs for values that continue to emerge in response to changes in the needs of existential reality. Just as democracy in the United States emerged differently than the social democracies of Western Europe, democracies of the Middle East will be vastly different than the social democracies of Western Europe. These changes in the needs of existential reality. Just as democracy in the United States emerged differently than the social democracies of Western Europe, democracies of the Middle East will be vastly different than the social democracies of Western Europe, democracies of the Middle East will be vastly different than the social democracies of Western Europe, democracies of the Middle East will be vastly different than the social democracies of Western Europe, democracies of the Middle East will be vastly different than the social democracies of Western Europe, democracies of the Middle East will be vastly different than the social democracies of Western Europe, democracies of the Middle East will be vastly different...
him to create the Center for Human Emergence Middle East (CHE Mideast) that I discovered the need to further define the importance of this part of our model. For someone who was born in Lebanon, I noticed certain events, behaviours and phenomena in Middle Eastern culture that were missed by most of my highly intelligent Western colleagues. This pattern of things lost in translation kept repeating in higher frequency as our work progressed, making it necessary for me to conduct research into this field. I began to develop my model after much analysis of field data and assessment of why developmental problems persist in spite of all the good intentions behind foreign aid and the noble work of Non-Governmental Organizations.

Often the term “indigenous” is associated with native minorities and cultures of the developing world that have been marginalized by progress. In this context, I was looking to redefine the meaning of indigenous to include the “unique value-systems expression” of the complex intelligences within each culture. Those are the type of experts who can offer their countries, and the world community creative solutions that meet the challenges facing our world today. After weeks of research including a detailed look at the multiple intelligences model of Howard Garner, I found no definitive studies into the field of local cultural intelligence as its own area of academic focus. No researchers have viewed the importance of this intelligence the way we viewed it at the CHE Mideast.

Based on my field experience and the extensive research I conducted, I came to define indigenous intelligence as follows:

**Indigenous Intelligence (II)** is the multidimensional capacity of an individual or a group in a specific society to interpret its value-systems’ complexity to non-natives. It is represented in a cross section of any given society, from Millennials to women, community leaders and elders of the tribe. Unlike other intelligences, it provides rich and actionable culturally fit answers, to why certain individuals or groups act in certain ways. Why do they have certain preferences, priorities, beliefs and worldviews and why solutions need to be tailored for their specific value-structure.

**Indigenous Intelligence** informs governance by assessing where people are in their developmental stages and the challenges they face. It paints a more complete picture of the obstacles facing stakeholders in a society, not just the elite and the privileged. It always finds opportunities in the challenges facing a certain society and finds a silver lining through creative thinking. Economic and political development that is informed by it places the uniqueness of people’s capacities into a long-term resilient scheme that makes the culture move at its own healthy pace towards a collective vision of the future.

**Indigenous Intelligence** is manifested in individuals as well as groups who are known as Indigenous Intelligence Experts (IIEs). They exhibit some of the following characteristics:

- They are most likely natives of the territory who speak the language, know the customs and understand the culture and the many subcultures within it.
- Their thinking is an open-system with high cognitive abilities. They can speak with ease to a tribal leader in the same colloquial tongue as well as to a national or Western politician and be fully aware of the value-structure distinctions of what is being said.
- He/she is shaped by a first-hand experience of his/her own transition from being zealots and flamethrowers. He/she has earned his/her dues in becoming a conciliator and pragmatist who thinks about future generations and their wellbeing, rather than revenge, instant gratification, and traditional allegiances.
- While the West paints with broad strokes that miss the finer details, IIEs instinctively discern the complex patterns of their society allowing for a natural process of identifying developmental gaps.
- They understand the value-systems meaning of history through first hand experience not the simplicity of western historic narrative.
- They understand the complexity and the uniqueness of the indigenous challenges that brought the culture to its current status of desolation.
- They are strategic and systemic in their thinking and believe in efforts that can be sustainable and resilient for generations to come.
- They look at Western organization’s objective for peace and prosperity and help them channel their efforts as not to offend local stakeholders and historic grievances while at the same time providing culturally honed plans for distributing resources where they are most needed.
- They are servant leaders, who realize that functional alignment with the needs of their society is at the top of their agenda.

IIEs open the door to a culture from the inside in societies that would otherwise be hesitant to disclose any information to an outsider. They can move freely through the various value-systems within their culture, knowing how to uncover the challenges facing it. They can repair the expression of every local value system. In parts of the Middle East, that have seen war, and have gone through the Arab Spring, many IIEs gain respect due to their activism and sacrifice. It is very likely they had served time in jail for their
views and actions. The rest of the culture witnessed their transformation from tribal and feudal lords to pragmatic leaders and conciliators. They live in two worlds and cater to the traditional needs of the tribe while expressing with clarity, and vision, the future needs of their nation.

Under the Functional Democracy model, IIE’s are the primary source of information for individuals in charge of creating the blueprint for democratic and transitional institutions. These experts who make up a second layer of experts are called Integral Design Architects (IDAs). They rely greatly on the input of IIEs to design large-scale systems. IDAs are the quintessential Seventh Level thinkers who place all the data coming from the IIEs into a memetically functional design scheme. They play their crucial roles from behind the scenes as they shape the thinking of politicians, business leaders, heads of NGOs and global aid agencies. IDAs are generally not interested in the visibility their work allots them but in the functionality of the systems they design. By doing their work from behind the scenes, they insure their recommendations take on the highest form of indigenous design leading to optimum success.

**Framing Conflict Through the Prism of Value Systems**

Essential to the design of Functional Democracy is a new understanding of the nature of conflict and the values of the politicians who shape it. Much of the science on conflict today relies on the seminal work of Muzafar Sherif, Caroline Sherif, and Carl Hoveland and the two models they created. The Sherifs verified a model called Realistic Conflict Theory (RCT) through the Robbers Cave Experiment. The theory accounts for group conflict, negative prejudices, stereotypes, discrimination and even violence as being the result of competition between groups for limited resources. In later years, the Sherifs worked with Hoveland and authored the Social Judgment Theory (SJT), which explains how attitudes are expressed, judged and modified. Beck was a student of Muzafar Sherif while working on his PhD at the University of Oklahoma in the Sixties. He combined the most notable findings from both theories and added to them many elements of the value systems model giving much impetus to his experience in the field.

Beck closely reexamined the underlying assumptions affecting the importance of intra-group dynamics on each side of a conflict. Using SJT, he transformed the assimilation and contrast aspects of group dynamics by providing a far more sophisticated articulation of the different spectrums that represent the different value systems on each side of a conflict. This pioneering model became known as the value-systems Assimilation-Contrast Effect model, or the VACE model for short. It became the basis for identifying the most important parties and individuals to a conflict in our work at the CHE-Mideast.

According to the model, there is a total of six positions or standings related to beliefs and actions on each side of the spectrum in any given conflict. VACE more accurately predicts the motivation of people, groups and cultures under conflict conditions. It illustrates graphically the dynamics of polarization, social conflict and the balance of perspectives in the pursuit of systemic equilibrium (peace, armistice, non-violence) between opposing viewpoints or values. Each position has its own value system preferences or mix of value systems. These are expressed in designations of R-1 through R-6 for positions on the right side of the issue, or L-1 through L-6 for positions on the left side. The designation of ‘right’ or ‘left’ side does not indicate any party affiliation or political leanings, although it can be used that way for convenience if the political left and right are being discussed.

The six positions based on the spectrum of value systems approach to a conflict are as follows:

1. Flamethrowers (R-6 & L-6): These are the groups that are represented by the Third Level value system. They are aggressive, violent and predatory with intent to destroy, attack and eliminate the opposition without the possibility of compromise.

2. Zealots (R-5 & L-5): These are groups centered partly in Third-Level and partly Fourth Level. They are highly directed by doctrine, partisan, and fiercely fervent, tending toward “all or nothing” demands.

3. Ideologues (R-4 & L-4): These are the True Believers represented by the arrested stage of the Fourth Level system. They are absolutists with firm convictions and rigid boundaries.

4. Moderates (R-3 & L-3): This is where an open Fourth-Level system exhibits softer beliefs. This group recognizes the entry phases of the Fifth Level system. They are more open to seeing options for compromise and negotiating trade-offs, although they want to come out ahead. Positions can be somewhat intense but have less ego-involved in negotiation.

5. Pragmatists (R-2 & L-2): This position is in the Fifth-Level system. They are very practical and believe in results that work. They advocate the art of the possible, creative and functional solutions, and can be highly skilled at negotiation.
Conciliators (R-1 & L-1): This is the position where Fifth Level meets Sixth-Level system. This position seeks inclusivity, consensus and a place for everyone to feel good about the outcome. They often do not recognize manipulative strategies used by the other First Tier systems to gain sympathy and concessions.

The way each value system perceives the others on the left or right side of an issue determines whether they view the other perspective as one that ‘assimilates’ within their own viewpoint, or in ‘contrast’ to their viewpoint. ‘Assimilation’ expects that ‘if you aren’t against us, you are with us’. Since this isn’t really the case, a lot of ‘internal marketing’ might be spent attempting to create stronger converts to the cause. “Contrast” expects that ‘if you aren’t with us, you are against us’. As a result of this dynamic, the debate no longer contains six positions on each side of the values spectrum, its the Ideologues, Zealots and Flamethrowers on one side (the rigid “us”) vs. the Moderates, Pragmatist and Conciliators on the same side AND the entire other side. As Conciliators, Pragmatists and Moderates on both sides of any issue disappear the remaining positions are those that represent an “us vs. them” ideology, which then becomes the loudest voices being heard. This is extremely important particularly in terms of mass media.

The silencing of the middle spectrum of a debate results in an unbalanced representation of the issues and further polarization. Ultimately this is the foundation for serious conflict. Unfortunately, in a world that feeds of small sound bites and 24/7 news, the mainstream media only reports the sensationalized polarization of opinions. This creates a broader and more embedded view of the “us vs. them” cultural schism.

When we use this model in the Middle East, we call it the Hearts and Minds strategy. We design steps on how to drive the hearts and minds of people away from the corrosive effects of the “us vs. them” dynamic through the following steps:

1. Create a wedge between the radicals (Flamethrowers, Zealots, and the closed-system Ideologues), and the more Moderate positions on each side of the value spectrum simultaneously.

2. Enhance the capacities of the Pragmatists and the Conciliators so they are able to solve the deep conflict and answer to the needs of the people.

3. Anticipate the radical chitchat among the Flamethrowers and Zealots and depress the polarizing dynamics.

4. Inoculate the masses and the decision makers against “Us vs. Them” rhetoric.

This is the model we presented to the United Nations and to the US Department of State on a few occasions. We always recommend that focus should not
be placed on negotiating with the loudest voices, which has repeatedly resulted in failure. Focus also should not be placed on negotiations when the majority of a society on one side of the model is centered in the 1, 2 and 3 positions, while the other side is centered in the 4, 5, and 6 positions. This was the case in our work in Israel and Palestine. Instead of repeating the failed scenarios of the past our focus turned to help the Palestinians build capacities and institutions within their own culture. We sought to level the asymmetry between the Israelis and the Palestinians by helping the Palestinian side move their culture to a center in the 1, 2 and 3 positions where negotiations become equitable and the results more lasting.

I S R A E L A N D P A L E S T I N E ,
T H E C A S E S T U D Y

Throughout this article reference was made to our field application of this framework in the Middle East. Our organization, the Center for Human Emergence Middle East began a mission in 2005 to help Israelis and Palestinians break the logjam that was preventing permanent peace from taking hold. The large-scale social psychology tools that are outlined in this article were applied in Israel and Palestine over a five-year period. Here is a summary of that field experience.

I had met Dr Beck a few years before we started our work together and was thoroughly familiar with the value systems model, his work with large scale psychology and his field experience in helping lay the ground for South Africa’s transition from Apartheid. After the events of 9-11, Mr Beck set his eyes on bringing his work to the Middle East. Following the South African model, he was looking for someone who understood the cultural values of the Middle East as well as the value systems framework and large-scale social psychology and with whom he can start a new initiative. That is how we began our long professional partnership.

The efforts needed to create a tipping point in how Israelis and Palestinians perceived a solution to the conflict were massive. Although we wanted to do the work, we were careful as not to accept funding from government sources or the UN in order to preserve the integrity of the approach. Many American and Canadian businessmen who knew Mr Beck offered to sponsor our initiative. The first step was the most arduous as we began our search for IIEs on both sides of the conflict. This was a meticulously drawn out process that took over a year to complete. We wanted to make sure that whoever was picked had the qualifications of an IIE that were described earlier.

On the Palestinian side our initiative drew the interest of members of the Third Generation Fatah political movement. They were led by Nafiz Al Rifae a pragmatist with strong Fifth Level values. Nafiz was also influential with Palestinian Authority President Abbas and his powerful Old Guard as well as in shaping the minds of Fatah’s future generations. Most IIEs under his leadership had a fresh perspective on the future of a non-violent and a corruption-free Palestine. Neri Bar-On, a successful engineer, who exemplified the bright Fifth Level values, and had embraced the Sixth Level humanitarian values, led the Israeli side. Most IIEs in his group also had a future vision of a more peaceful Israel. All EEs were trained in the value systems methodologies for research before doing fieldwork.

Once the teams of experts were in place on both sides, we proceeded to map out the memetics of both Israel and Palestine. This long drawn out process showed a true depiction of the value systems in both cultures, and how they react to existential threats. More notably what we observed was that Israel was a first world country with values centered in the 4th and 5th level value systems and emerging into the 6th level system. Palestine, on the other hand was centered in the 2nd and 3rd levels and emerging into the 4th level. In short, Palestine had many developmental challenges.

This became the catalyst that shifted our focus from negotiating a better deal on peace accords, to building the capacities of Palestinians. We called this “The Build Palestine Initiative.” Our work for the following few years was to give the Palestinians a vision of their own future and think of ways to influence their representatives to build their own indigenous institutions and support a future state. For several years the Palestinian IIEs roamed every town city and village in the West Bank to spread the memes of “prosper and let prosper,” as part of the new value structure that the Palestinians were aiming for.

In 2008 this large-scale design project culminated in a summit on the future of Palestine, where over 700 community leaders and Fatah Third Generation Party officials detailed their vision of a prosperous and peaceful Palestinian State. This became the blueprint that inspired many progressive Palestinians, including Prime Minister Fayyad. Today, although the Arab Spring has taken the spotlight away from Israel and Palestine, the CHE Mideast, still advises many IIEs on how to shape their indigenous institutions that will eventually lead to their own version of Functional Democracy.

C O N C L U S I O N

The Functional Democracy model requires the fundamental reworking of many of the assumptions the world has about the virtues of Democracy. As
Winston Churchill once told the British House of Commons: “Democracy is the worst form of government except for all the others.” Our model is one that is evolutionary by nature. By using the principles that are outlined here, the model becomes a template created by the people for the people, which in turn elects politicians who are of the people. When it comes to the Middle East, since the region is centered in the Second and Third Level of values and is entering the Fourth Level system, Functional Democracy might mean that parts of the region will naturally elect a benevolent leader to take them to the next stage of their development. Other parts of the Middle East might be ready for an authoritarian democracy that can channel the energies of the Third Level values. This is evident in what is happening in Egypt as the country rejected the Muslim Brotherhood and its 3rd level values, while the country’s liberals with 6th level values can’t seem to gain enough political traction. The autocracies the Egyptian army represents are the values that Egypt needs before it can transition to a truly representative democracy. Whether General Al Sisi will represent the healthy aspect of the system is still to be determined.

The Middle East is a region on a hero’s journey that requires the building of resilient institutions. The road ahead might be bloody and dangerous at times just like most historic transitions from the Third to the Fourth level of values were in human history. But, knowing the people of my region I have high hopes that the resilience that made them endure for so long will shine through again as they integrate into an increasingly more complex world.


References


THE RELATIVITY OF INNOVATION

ALESSANDRO COLOMBO

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THE INNOVATION DYNAMICS IS COMMONLY REGARDED AS a linear process leading to both a technological progress and business growth, with subsequent positive fallbacks for the individual and social development. This sort of oriented process can be described as an additive innovation model and describes the reality of large technological projects, such as the International Thermonuclear Experimental Reactor (ITER), the space missions, the fight against cancer, where the overall success depends on the outcome of many challenges pointing at a common goal.

On the other hand, in highly competitive markets such as consumer electronics, telecommunications, food and beverage, automotive and other widely diffused products, the technological evolution is not linear, but rather starrypunctual, consisting of a constellation of uncoordinated single pieces of innovation pointing in different directions. Such chaotic model of expansion is also reflected in the global databases of patents, where each invention is described as an original and advantageous solution to a certain technical problem.

However what is problematic and what is beneficial is strongly dependent on the point of view of the inventor, the investors and the target group of customers for which the invention has been conceived. In the present article three dimensions of relativity of benefits are identified and discussed, and an approach towards a more comprehensive and cooperative view of the innovation value is suggested.

THE RELATIVITY OF PERFORMANCE

Assuming the definition of a product performance as a "degree of match with the customers’ need", the majority of innovative ideas actually offer an improvement in some aspects at the expense of other ones. For instance, an increase in power output of an engine or a machine raises corresponding problems on its safety level. An improvement of the robustness – e.g. of a portable device – has a negative impact on its lightness.

Looking at a number of inventions in technical areas of mechanics, electricity and electronics, it is possible to identify the following dimensions of complementary characteristic, wherein an advantage in one direction implies a corresponding disadvantage on the other end:

- POWER <-> SAFETY
- ROBUSTNESS/RELIABILITY <-> LIGHTNESS/SIMPLICITY
- QUALITY OF OUTPUT <-> COST/AFFORDABILITY
- SPECIALIZATION <-> INTEGRATION (MULTI-FUNCTIONALITY)
- OPENNESS <-> MANAGEABILITY
- STANDARDIZATION <-> CUSTOMIZATION

This table is merely exemplary and not limitative, and depends on the technical field to be considered. However, the underlying concept is more general and defines a degree of relativity among technical improvements. The innovative coin has two sides, and a comprehensive view of a technological spring requires an assessment of the foreseeable drawbacks for the users or for third parties. This balanced approach could be exercised, for example, based on the following key questions:

- on which line(s) of improvement is a certain innovation moving;
- which needs does it satisfy, which ones it does not, which new needs does it create;
- which new skills does it stimulate, which ones does it inhibit; and
- how are users affected by its prolonged or repetitive use.

It is interesting to pose such questions looking ahead into the products or services, which are likely
to invade our houses and offices in the next five-ten years. What would be the impact of new types of apparatuses like 3D-printers, Google-glasses, electronic clothes, flying cameras, or new services like online education, augmented reality, distance touching/smelling, instant language translations, and other breakthrough technologies?

**THE BOOMERANG EFFECT**

We have today faster, safer, cheaper and more efficient vehicles than twenty years ago, and yet all statistics show that the average speed of our urban trips is constantly decreasing due to traffic jams, road works and exhausting search for a parking space. Internet chats and social networks help distant friends and relatives getting more connected with each other, and yet they lead to a higher loneliness at local scale and the risk of decrease of social and personal contacts.

The boomerang effect arises from an implicit contradiction hidden in many forms of innovation; once they reach a critical high level of diffusion the resulting effect is the opposite of their original scope. Some innovations are simply not sustainable at larger scale without contradicting their basic grounds, and therefore shall be used moderately or adopted with some limitation. Thinking for example at the development of the electric cars, many concerns have been raised about a broad and uncontrolled penetration of such vehicles, as it would most likely increase the environmental impacts of the transportation sector instead of alleviating it. At least this is foreseeable under the current technology of the electric batteries, which is still relatively heavy and polluting, as well as the current mix of electricity sources, which is still based for the 75% on fossil fuels worldwide.

In order to anticipate or detect possible boomerang effects the key questions to be posed in front of a certain innovative item may be as follows:

- what are the improvement and the drawbacks along the whole life cycle;
- what complementary services does it require and what externalities does it create; and
- how will the society be affected by its diffused use.

In this respect, strong concerns about the sustainability of two developing energy technologies have been raised, even at political level in several countries. One is the extraction of shale gas, an abundant source of natural gas present in underground rocks, which however requires chemical injection and material fracking, often polluting the local water reserves. The second is the Carbon Capture and Storage (CCS) technique, invented for reducing carbon emissions in the atmosphere by extracting carbon from the exhaust fumes and storing it in caves or hollows underground. Both technologies clearly affect the equilibrium of the surrounding ecosystems and would most certainly lead to a boomerang effect if adopted beyond a certain limit.

**THE SHIFT OF POWER**

The third dimension of relativity to be highlighted is the power game associated to the technological development. Who will gain more power and who will lose it? History of innovation shows that the advent of new technologies can move controlling power away from traditional subjects and reassigns it to other ones. Typical cases are the burnout of Kodak upon the diffusion of digital photography, as well as the decline of Motorola with the affirmation of the encoded GSM mobiles. A redistribution of power can be observed not only among competitors but also among actors placed in different level of the value chain within an industry.

In the travel sector, for example, the internet booking systems have strongly diminished the role of travel agents along a broad spectrum of services, from single flight reservation to holiday packages. A similar reshape is now happening to bookstores and music shops due to the spread of online ordering and delivery systems. Giant online platforms like Amazon have acquired an increasing power not only to sell and to gain premium margins, but also to influence the customers’ choices by means of individualized advertisement, discounting policies and other attractive offers. Also low-cost flight carriers exercise now a certain persuading power on travellers in the choice of the destination for a holiday or a city visit, and for ancillary services like hotel reservation and car rental. A central market position allows the control of the game.

Several other examples can show that innovation is often driven by a shift of controlling power – and the related business opportunities - from one group to another. It is therefore important to consider the power trends associated with certain technological or business developments.

In this respect, some key questions may include:

- who are the advantaged groups and who the disadvantaged;
- who will gain a higher share of the market, who will lose it; and
- who will better control the technology, i.e. decide future developments.

Examples in the field of factory automation and robotics show that a large number of inventions do
not necessarily lead to an higher profitability - especially in contexts of medium size enterprises with less standardized manufacturing chains - but to a more centralized control of the industrial processes, leading to a reduction of power of the traditional workforce.

**Cooperative Innovation**

The examples mentioned above remind us that the mechanisms underlying the technological innovations tend to mirror the same competitive logics that take place in the marketplace. Each actor in the innovation arena has the objective to maximize his own returns on the Research & Development (R&D) investments with no particular incentive towards a general evolutionary interest. At best, the public eye is interpreted by regulatory bodies and authorities.

However such a contrasting model is being slowly but increasingly questioned thanks to a growing awareness about some associated inconsistencies (e.g. greenhouse effect) and a clearer perception of the intimate connections between private and public subjects in modern societies.

To date, many private enterprises, such as the microcredit banks, the fair-trade markets, the purchase communities, are based on a solidarity economy. They are not to be confused with no-profit organizations or socially-oriented foundations, whose working model is comparable to volunteering. These entrepreneurial forms are still profit-oriented but have broader set of objectives, able to take into account the value of the human resources, the environmental benefits, and a balanced distribution of rewards along the entire value-chain. Such innovative business models were mostly unknown only twenty years ago, and are being successfully developed and integrated in the current economy.

Other sustainable and cooperative forms of innovation are the R&D projects supported by crowd-funding. In comparison with the funding from centralized research institutions or corporate R&D departments, crowd-sponsored projects can better represent diffused needs and desires which are not necessarily highly profitable for the investors, but more promising for the users. It is the public to select the most attractive proposals by conceding or not the required capitals. At the moment the crowd-funding platforms are mostly occupying the smaller and lower end of the innovation arena, limited to items for everyday use, apps for smart-phones, artistic and editorial projects. However according to several observers the potential of crowd-sponsored and/or open innovation is really huge and is likely to move upwards to an industrial scale in the next years, extending to the transportation sector (e-bikes, 500-dollar vehicles), medical diagnostics and other key industries.

A final example of cooperation-oriented innovation is visible in the segment of renewable energies – one the fastest growing business segment in the recent five years – and the smart grids, which combine together the possibility of electricity generation at different scales (i.e. single household, building, zone, city level) with the real-time communication technologies, also called the “internet of energy”.

By consulting the patent publications in this sector [see the Box below] it is noted a growing number of inventions directed to a democratized control of the energy distribution as well as energy management systems for communities of users. The concept of community is different from a simple aggregation of consumers not only because of the co-ownership of some asset (e.g. an installation of solar panels or mini wind turbines) but also because it implies a certain degree of value-sharing among the participants and a mutual agreement on technical or organisational aspects. In the mentioned case, for instance, these innovative energy controllers require to specify different rankings of priority for different electrical tasks, since the energy availability from the local source is sometime insufficient to satisfy the whole demand, thereby stimulating a more connected and cooperative approach throughout the community members.

**Conclusion**

This brief overview of the innovation approaches and effects does not lead to any firm conclusive statement, but rather to a set of open thematic points to be developed with spirit of curiosity. The importance of innovation, its speed and its impact on a global equilibrium are today as high as never been before, and requires a corresponding rise in the overall awareness about its effects, its benefits and its drawbacks. Many technological improvements have shown a boomerang effect at a broader scale or are simply driven by a power match between competitors.

On the other side, different models and practices of innovation activities are now available and have been successfully implemented. In such cooperative approach the economic or strategic return is not prioritized but is considered together with a broader interest for the public and the community.
The patent literature is a huge and steadily increasing source of technical information; it covers all fields of technology and is a useful indicator both for trend analysis and for specific technical consultation. The European patent database, in particular, collects all patent applications published by the major five patent offices worldwide (Epo, Us, Japan, China, and Korea) as well as by most of other national patent offices, for a total of circa 80 million documents. This information is freely available to the public, and can be consulted via several access portals by entering publication numbers, names of inventors and/or more articulated filtering criteria, such as codes of the technical field, keywords or text queries.

One of the most practical consultation platform, accessible without registration, is “Espacenet” provided by the European Patent Office in its main web page (www.epo.org) or directly reachable via the link http://bit.ly/1hCjJS0.

In the Espacenet access page the following three options are available (top-left):
- Smart Search: accepts simple queries with a maximum of 20 terms;
- Advanced Search: accepts complete queries by means of mixed search criteria;
- Classification Search: permits to find the code of a technical domain.

Example:
Searching for documents in the field of <electrical distribution> related to a <community of users>.

Step 1: Finding the code of the technical domain:
- Open “Classification Search” (top-left).
- The most appropriate area is “H” (Electricity), click on it and read the options.
- The most appropriate subarea is H02 “Generation, conversion and distribution of electric power”, click on it and read the options.
- The most appropriate class is H02J “Circuit for [...] distributing electric power”.

Step 2: Finding documents in the selected class related to a community of users.
- Open the menu “Advanced Search” (top-left) to access the entry mask.
- In the upper box “Title or Abstract” enter the desired term, i.e. “community”
- In the lower box “CPC” (patent classification) enter the desired field code “H02J”.
- Click on the bottom-right button “Search” and browse the results.

At the time of writing, the search result is a set of 26 documents, which can be viewed by a simple click. Not all the documents are highly relevant, since the terms “community” may indicate a slightly different concept. However particularly interesting appear to be:
- US2013262197 “Community energy management system”
- WO2013128422 “Method for managing electric energy [...] to users belonging to a community of users”

With a similar query, documents related to democratization of control can be retrieved, such as
- US2012035778 “Automated system for democratizing power”.

References
Andrew Gavin Marshall is an independent researcher and writer based out of Montreal, Canada. He is Project Manager of The People’s Book Project, Chair of the Geopolitics Division of the Hampton Institute, Research Director of Occupy.com’s Global Power Project and the World of Resistance Report, hosts a weekly podcast at BoilingFrogsPost.com, and is a co-founder and Vice President of Voice of Access: The People’s Foundation.

HE VOICE OF ACCESS: THE PEOPLE’S FOUNDATION (TPF) IS a new initiative to establish a counter-hegemonic foundation – built upon an understanding of the hegemonic foundations that have been so pivotal in the construction and maintenance of the present social order – to effectively challenge and help to make obsolete the existing social order. Through the formation of new educational, research and media initiatives and organizations, the construction and dissemination of knowledge, connecting people and ideas from activists, intellectuals and groups around the world, The People’s Foundation hopes to aid in the multi-generational struggle of constructing a new – and fair – world order, to help lay the foundation for a future worth striving towards.

‘Voice of Access: The People’s Foundation’ is an initiative of myself and three other friends and associates, forming it as a non-governmental organization to act as a facilitator – and, when possible – a patron of organizations, activists, knowledge and social movements that seek to challenge and change the world order under which humanity now lives and struggles. From our backgrounds in research, writing, publishing, media, computer science and technology, and our experience with non-governmental organization and think tanks, we are seeking to channel our efforts into the operations of an organization dedicated to facilitating and supporting the efforts of others around the world. While we hold opposing views and philosophies to those that pervade the hegemonic foundations, our understanding of them and their successes in shaping the present global order helps us focus on methods with which we can challenge and seek to change that order.

In discussing the ways in which TPF would seek to operate and work toward achieving its objectives, it would first be useful to briefly outline some of the ways in which the major dominant foundations have operated in working toward their own objectives. As a case in point, I will focus on the Rockefeller Foundation (RF), founded in 1913 by John D. Rockefeller “to promote the well-being of mankind,” as its original mission statement postulated.

THE ROCKEFELLER FOUNDATION: SOCIAL ENGINEERING FOR SOCIAL CONTROL

In the late 19th and early 20th centuries, the United States – and much of the industrializing world – was in the midst of profound transformation and turmoil. Successive economic crises created growing uncertainty among an increasingly distrustful middle class, as the rich ‘Robber Baron’ industrialists (Rockefeller chief among them) grew ever more rich and powerful. Social unrest by the poor, workers, immigrants and others was threatening the prevailing social order. Those who sat atop the social hierarchy – notably, the ‘Robber Barons’ themselves – grew increasingly nervous at the prospect of the threat of revolution from below, as well as the growing restlessness of the middle classes. Actions and initiatives needed to be taken to safeguard powerful financial, economic, political and social interests.

It was a time not only of economic and social crises, of growing unrest, revolutionary fervour and industrial and financial consolidation into huge concentrations of economic power, but, simultaneously, was also a period of increasingly expansionist and imperialistic foreign policies. These were most notably on the part of the United States, which was extending its hegemony throughout the Caribbean and Central America, and reaching across the Pacific, with the most noteworthy example being in the Philippines, and with growing interests in China and Japan.

Changes in technology and communication were facilitating the spread of more information to more people than ever before, and the concept of ‘the public’ – and specifically, how to manipulate the
The foundation functioned – and continues to function – as an institution dedicated to the process of social engineering with the objective of social control. In short, the foundation’s purpose was to identify major issues and areas of contention in the existing social order, and to subsequently find methods of promoting ‘reform’ and changes so as to manage the process of adaptation, undermine radical efforts at transformation and promote more moderate forces, integrating them within the existing social hierarchy and order. The goal, ultimately, was to maintain the social hierarchy itself.

Foundations would achieve these objectives by acting as major patrons of universities and the social sciences, to bring together prominent individuals from academia, politics, finance, industry and the media in an effort to promote consensus between society’s dominant institutions and those who run them; and providing funding to social movements and initiatives so as to gain significant financial leverage over the direction of social movements, increasing support for reform-oriented and legalistic approaches to resolving social issues, and thus undermining and ostracizing more radical alternatives.

Foundations sought to manufacture ideology and consensus between elites, to institutionalize these ideologies within the existing and evolving dominant social structures, and to ‘engineer the consent’ of the governed. Over the course of the 20th century, major foundations – with the RF being perhaps the most prominent – exerted an immense, if not largely unknown, influence on the development and evolution of the United States. By virtue of the United States being an outwardly expansive and imperialistic society, that influence extended to much of the world.

Early on in their development, the US Congress investigated the major foundations with a wariness of the intentions and functions they established under their extremely powerful and wealthy ‘Robber Baron’ patrons. In 1914, the Walsh Commission was formed, noting that the establishment of the RF – among others – “was the beginning of an effort to perpetuate the present position of predatory wealth through the corruption of sources of public information” and that if these foundations were left unchecked, they would “be used as instruments to change the form of government of the US at a future date, and there is even a hint that there is a fear of monarchy,” noting that many of the foundations represented the interests of powerful industrial and financial dynasties. In the final report of the Walsh Commission in 1916, it was concluded that foundations represented so “grave a menace” to society that “it would be desirable to recommend their abolition.” Obviously, this did not take place.

As anthropologist David Nugent documented, the development of the modern social sciences by Rockefeller and Carnegie foundations (and later, with other foundations joining) was directly linked to the expanding global interests of the United States in becoming an imperial power and in managing domestic unrest at home. Foundation boards consisted not only of the dominant industrial and financial interests, but also of prominent intellectuals and foreign policy figures, all of whom together were well aware of the effects that industrialization and imperialism were having on people at home and abroad, and sought to find new ‘scientific’ ways of managing these changes without undermining their own social positions. This required a very careful, incremental and adaptive approach to social engineering. As a top Rockefeller philanthropy official, Wicliffe Rose, wrote in 1923, “All important fields of activity […] from the breeding of bees to the administration of an empire, call for an understanding of the spirit and technique of modern science,” which “determined the mental attitude of a people, affects the entire system of education, and carried with it the shaping of civilization.”

The RF sought to establish “institutional centres of social research” in key nations around the world, facilitating exchange and collaboration between these various institutions that would ultimately “serve as a model for the development of the social sciences generally.” The initial focus was in the United States and Europe, aiming – in the Twenties – to establish roughly 12-15 major centres of social science research, one of the most important of which was the London School of Economics. Through fellowship programs sponsored by foundations, students from around the world would be taken to schools in the United States where the foundation influence over the development of the social sciences had already become significant.

Edmund Day, who ran the RF’s Social Sciences Division, wrote in 1930 that the social sciences were to engage in “human engineering” and that, “the validation of the findings of social science must be through effective social control.” Over the following years, the Foundation increasingly looked to establish within the social sciences a greater emphasis on ‘International
Relations’ as well as – in the wake of the stock market crash and the start of the Great Depression – a greater emphasis on “the planning and control of economic structures and economic process.”

Max Mason, the president of the RF, wrote in 1933 that the policies of the Foundation “were directed to the general problem of human behaviour, with the aim of control through understanding,” noting specifically that the “social sciences, for example, will concern themselves with the rationalization of social control,” whereas the natural and medical sciences would be concerned with “personal understanding and personal control.” Control, it seemed, was always the ultimate objective.

Concurrent with the development of the social sciences and major universities in the United States and Europe, Rockefeller and Carnegie philanthropies, among others, sought to construct an ‘educational’ system for black Americans in the South, which was deemed so successful that it was exported to several British colonies as a means of exerting colonial domination over subject populations. Beginning with a series of conferences between Wall Street bankers and northern industrialists in the late 19th century, an educational system for southern black Americans was sought in such a way as to ensure that the hierarchy which slavery had established between races would remain relatively unchanged. As one conference participant put it at the time, “the white people are to be the leaders, to take the initiative, to have direct control in all matters pertaining to civilization and the highest interest of our beloved land.” Conference participants agreed, on the other hand, that “the negro” was “best fitted to perform the heavy labour in the Southern states,” as, it was suggested, “he will willingly fill the more menial positions, and do the heavy work, at less wages.”

These conferences concluded with the establishment of what was known as the ‘Tuskegee educational philosophy,’ agreed upon in 1901, where attendees agreed on the need to “train a Negro leadership cadre” as “a strong professional class,” requiring a strengthening of certain ‘Negro colleges,’ while the majority of education for black Americans was to remain “vocational and agricultural in focus […] to be directed toward increasing the labour value of his race.” In time, the major foundations became involved in this endeavour, and the Phelps-Stokes Fund in particular took up this objective with a great deal of fervour, establishing schools dedicated to training black men in vocational and agricultural trades and black women in “home economics.”

In 1917, the Phelps-Stokes Fund published a two-volume survey on Southern Negro education, in which they maintained that academic and literary education was “dysfunctional for the black man” because it would create unrealistic expectations for black Americans in a segregated society. It claimed furthermore that would not provide the skills deemed necessary to become a “productive” worker, and, ultimately, it would undermine white dominance of society itself.

British colonialists took note of the success of the Tuskegee educational philosophy, and missionary educators from British colonies in Africa began cooperating with the American foundations and schools in replicating the Tuskegee educational system in several British colonies, including in Kenya and even South Africa, where it helped in the construction of the apartheid system. The education of black South Africans, in the words of a prominent Phelps-Stokes Fund official, was to keep the blacks as “junior partners in the firm!”

Not unrelated, in the early 20th century, the major American foundations – and the vast fortunes of ‘Robber Barons’ – contributed to the acceptance, institutionalization, and exportation of the eugenics movement (sometimes referred to as ‘scientific racism’). Eugenics was an extremely dangerous and destructive pseudo-science (or, rather, in truth, a religious orthodoxy in search of legitimacy) which was focused on the objective of refining the social engineering of the species, itself, to take ‘evolution’ into their own hands. This philosophy suggested that concepts such as poverty, crime, race, disabilities, mental suffering and lack of intelligence were products not of social conditions – or the social order and its devastating effects – but rather, they were inherent, genetic ‘defects’ experienced by the ‘unfit’. As a corollary, those who had risen to the top of the social hierarchy, the rich, white men of property and privilege, were considered to be the most intelligent, the racially superior, the “fit.” Thus, it was not avarice, crime, manipulation, expropriation, enslavement, theft and domination that made them rich; it was their ‘genetic superiority’. This – conveniently – was an ideology which justified the enormous wealth and power held by a small minority, presenting it with scientific language that aimed to ground the social order as being one constructed through “natural selection” and evolution. As such, it was considered ideal for the “fit” to breed with each other (and thus, in theory, create a type of super-species), while the “unfit” were to be encouraged to stop breeding altogether.

When the eugenics movement reached the United States from Britain in the late 19th and early 20th centuries, it garnered the attention of elites in America. And very quickly, the vast fortunes of the Harrimans, Carnegies and Rockefellers – among many others – were mobilized to support the movement. As the foundations were established, eugenics became a
major area of interest for their operations. The eugenics movement was arguably more successful in the United States than any other nation in the early 20th century, and in fact, it was from the United States that it was exported around much of the industrialized, western world. Eugenics affected the development and evolution of major institutions and ideologies of the era, such as the educational system, mental health, hygiene, medicine, psychology and psychiatry, migration, the criminal justice system, biology and the natural sciences. Between 1907 and 1927, twenty-three US states enacted eugenic sterilization laws for the "genetically unfit," ultimately leading to the forced sterilization of tens of thousands of people.

In fact, with the help of the RF, eugenics was exported to Weimar Germany, pouring hundreds of thousands of dollars into institutions dedicated to studying "race biology" and psychiatry. The German eugenics movement proved to be very successful, and when the Nazis came to power in 1933, eugenacists found a political movement espousing and embracing their ideas of racial inferiority and superiority. The RF continued its funding for Nazi 'race science' and psychiatry until the outbreak of World War II in 1939, by which time the impact had been profound. In fact, one of the most notorious Nazi war criminals, the "Angel of Death" – Dr Josef Mengele, the infamous Auschwitz concentration camp doctor – had previously done research which was funded by the RF, whose money supported experimentation done at various concentration camps.

Of course, following World War II, the eugenics movement had been largely discredited after the world witnessed the repercussions of such institutionalized and ideological hatred and racism, as revealed by the extent of atrocities in the Holocaust – as well as those committed by the Japanese in the Pacific. Thereafter, the major proponents and patrons of the eugenics movement sought to rebrand themselves in various forms. In fact, a 1943 edition of *Eugenic News* – the most widely-read publication of the eugenics movement – published an article by one of the ‘fathers’ of the eugenics movement, Charles Davenport, who advocated a vision of "a new mankind of biological castes with master races in control and slave races serving them". A 1946 edition of *Eugenic News* stated that following the War, "population, genetics, [and] psychology, are the three sciences to which the eugenicist must look for the factual material on which to build an acceptable philosophy of eugenics and to develop and defend practical eugenic proposals."

One of the more prominent efforts at rebranding eugenics emerged as the ‘population control’ movement. Largely an initiative of the Rockefellers, John D. Rockefeller III established the Population Council (PC) in 1954, designed to "provide solid science to guide governments and individuals in addressing population questions." Six of the ten founding members of the PC were well-known eugenicists.

Matthew Connelly has written the most definitive account of the origins and evolution of the population control movement, based largely upon the internal records of the various international and private organizations involved in promoting population control, including the RF and PC. The primary fear of the elites behind the population control movement was the great mass of civilization that fell outside the western world: the largely non-white, poor populations of the world, seeking to toss off the chains of colonialism and chart their own way in the world.

The population control movement – with the PC as its "nexus" – relied on extensive funding from the Rockefeller and Ford Foundations, and became quickly institutionalized in United Nations organizations, as well as in the ideology of 'development' for the 'Third World'. The result was measures designed to encourage population control becoming embedded within 'aid' agencies and development agencies. During the Eisenhower presidency, the issue of population had become "a national security issue" in the mind of the foreign policy establishment. The PC, Ford and RF, and UN agencies began working with USAID, the World Bank and other organizations in placing population control as a central element of US and Western foreign policy concerns and actions, especially in countries like India, with large and largely poor populations.

As the population control movement was exported around the world, it resulted in a great deal of tragedy and repressive actions by governments, such as in India and China, where forced abortions and forced sterilizations had become rampant at various times. The movement had, however, garnered significant opposition from many countries and regions around the world, and its institutional and ideological structure experienced major setbacks going into the 1990s. However, it has never wandered far from the minds of the super-rich oligarchs and patrons of major foundations.

In 2009, a secret meeting was organized among some of the world’s richest billionaires, organized by David Rockefeller, Bill Gates and Warren Buffet. Invited guests included billionaires such as Ted Turner, George Soros, Michael Bloomberg, and even Oprah Winfrey. The meeting was designed to discuss the future of philanthropy, “what motivated their giving, the areas of focus, lessons learned and thoughts on how they might increase giving going forward.” Each guest was given 15 minutes to discuss and promote their
personal favourite ‘cause,’ but after a great deal of discussion, they sought to establish an “umbrella cause” which could “harness their interests.” Apparently with Bill Gates leading the call, the billionaires agreed that “overpopulation was a priority […] in which population growth would be tackled as a potentially disastrous environmental, social and industrial threat.”

Out of this meeting, a new effort was begun – largely driven by Bill Gates and Warren Buffet – to encourage billionaires and the super-rich around the world to join in giving their enormous ill-gotten wealth to ‘philanthropy’, in what is referred to as ‘The Giving Pledge’, to try to get the rich to pledge 50% of their net worth to charity during their lifetimes or after death.

At the end of World War II, the United States emerged as the dominant global power, and its institutions became oriented toward finding ways to use, maintain and extend that power. Foundations played a key role in the development of think tanks and the educational system, with a focus on creating consensus among elites on the need for empire and in training future managers of the imperial system.

The RF played a key role in transforming the United States into a global empire. One of the most influential think tanks in the United States is the Council on Foreign Relations (CFR), founded in 1921. Early on, the CFR relied upon RF funding for a great deal of its operations. Between 1927 and 1945, the RF provided the Council on Foreign Relations with more than USD 443,000 in funding for “study group” research, which would subsequently be implemented in official policy of the US government. The Council has extensive ties to the foreign policy establishment of the United States, most notably with the US State Department. In fact, during the early years of World War II, the CFR established a “strictly confidential” project in cooperation with the US State Department to plan for US entry into the war as well as to outline a post-war blueprint for a US-dominated world. The project was entirely funded by the RF.

The results of the project outlined the areas of the world which the United States would need to control in order to maintain and expand its global power, referred to as the ‘Grand Areas’, which included, “Latin America, Europe, the colonies of the British Empire, and all of Southeast Asia.” The world was divided into four main blocs: the US-dominated Western hemisphere, the British Empire and its colonies, a German-dominated continental Europe, and a Japanese-dominated East and Southeast Asia. As the war went on, slowly the ‘Grand Area’ plans changed to the point where US planners decided that America ultimately had to dominate all of these regions, noting that, “as a minimum, American ‘national interests’ involved free access to markets and raw materials in the British Empire, the Far East, and the entire Western hemisphere.”

The RF took it upon itself to develop educational systems at elite universities, which would be dedicated to the study of ‘International Relations’ and ‘Area Studies’ programs. Along with the Carnegie Corporation and the Ford Foundation, the RF helped to establish Soviet Studies and Area Studies programs at multiple universities around the country, focusing on providing an education that could inform the application of policy. The Ford Foundation – with considerable financial resources – moved to the forefront of this endeavour. In 1967, a survey by the US State Department noted that out of 191 university centres of foreign affairs research in the United States, 107 depended primarily upon funding from the Ford Foundation. Between 1950 and 1973, the Ford Foundation contributed roughly USD 278 million to the development of ‘area studies’ programs at major American universities. While ‘International Relations’ was designed to focus on the study of a “realistic” approach and understanding of power (and how to apply it), ‘area studies’ programs focused on the study of the non-Western world.

The large foundations also provided financing and networking connections to aid in the establishment of other large international think tanks, such as the Bilderberg Group – which was founded in 1954 as a forum for Western European and North American elites to meet privately on an annual basis – as well as the Trilateral Commission in 1973, to bring the Japanese elite into the fold of the Western European and North American hegemonic class.

So while the major foundations were shaping the education of elites, socializing them in think tanks where they sought to establish consensus with domestic and international elites in other powerful nations and to manufacture and institutionalize dominant, imperial ideologies, they also worked to try to manage the “unwashed masses” of the world. Just as these foundations had constructed an education to keep black Americans and Africans as “junior partners in the firm” in the early 20th century, in the latter half of the 20th century they sought to export the Western-style educational system – and notably the foundation-influenced social sciences – to other regions and nations around the world in order to help develop domestic elites within those societies that would ultimately serve the interests of Western hegemony and empire.

Foundation officials were extremely concerned about changes taking place across the developing world,
where revolutionary and radical movements were attempting to rid their societies of European colonial domination. Foundation officials worked with members of the business and financial elite, alongside the foreign policy establishment, to attempt to manage the process and objectives of change in the ‘third world’. While acknowledging that the era of formal colonialism was at an end, these individuals were not eager to see people and nations chart their own individual paths to independence and freedom. Instead, formal colonial structures needed to be replaced with informal imperial structures. A consensus was formed between the foreign policy-makers, business class and foundation-academic officials that changes in places like Africa “must be evolutionary rather than revolutionary.” As a top Carnegie Corporation official noted: “American industry could ill-afford the loss of cheap sources of raw materials which could only be secured in the nations of Africa, Asia, and Latin America”38.

With this in mind, the Rockefeller, Carnegie and Ford Foundations undertook ambitious programs in Africa, Asia and Latin America which sought to create prominent universities and programs of social science research “in areas considered of geo-strategic and/or economic importance to the United States.” These would include the training of public administrators, teachers, the development of curriculums, and exchange programs that would have young academics in these nations come to the United States to receive training and education at prominent US schools like Harvard or Yale36. The objective was to channel the intellectual talents of these nations away from support for radical ideologies and revolutionary movements, and push them instead into the social sciences and the construction of domestic, technocratic elites that would see social problems as ‘technical’ issues requiring reforms and slow, evolutionary change39. As noted in the book Philanthropy and Cultural Imperialism:

The power of the foundation is not that of dictating what will be studied. Its power consists in defining professional and intellectual parameters, in determining who will receive support to study what subjects in what settings. And the foundation’s power resides in suggesting certain types of activities it favors and is willing to support. As [political theorist and economist Harold] Laski noted, “the foundations do not control, simply because, in the direct and simple sense of the word, there is no need for them to do so. They have only to indicate the immediate direction of their minds for the whole university world to discover that it always meant to gravitate to that angle of the intellectual compass”40.

As political scientist Joan Roelofs wrote, foundations exert their influence in multiple ways:

[By] creating ideology and the common wisdom; providing positions and status for intellectuals; controlling access to resources for universities, social services, and arts organizations; compensating for market failures; steering protest movements into safe channels; and supporting those institutions by which policies are initiated and implemented […] Foundations like Carnegie, Rockefeller, and Ford have a corrosive influence on a democratic society; they represent relatively unregulated and unaccountable concentrations of power and wealth which buy talent, promote causes, and, in effect, establish an agenda of what merits society’s attention”41.

Further, foundations play a role in providing extensive funding for social movements and non-governmental organizations (NGOs). Their funding for such social movement organizations typically follows years of organic and slow development of social movements from the ground up. Foundations typically move in to provide funding when a social movement is seen as a potential threat to the prevailing social order. Their funding subsequently focuses on supporting the more reform-oriented, legalistic and ‘evolutionary’ (as opposed to revolutionary) organizations, with an objective of helping them to become the dominant organizations in the movement and steer social movements in directions safe for those who own and operate the foundations themselves (representing the political, industrial and financial elites).

With this in mind, it is noteworthy that the Ford, Rockefeller and Carnegie foundations all provided extensive funding to many civil rights organizations in the 1960s and 1970s, “as a response to the threat posed by the generation of a mass-based social movement.” These foundations channelled their funding into support of “moderate civil rights organizations”42. Foundation funding for civil rights groups did not become common until the early Sixties, some five years after the Birmingham bus boycott, and the peak of foundation support was in the early Seventy, roughly five years following the assassination of Martin Luther King, Jr43. As more militant movements emerged in the later Sixties, such as the Black Power movement and the Black Panther Party, among many others, the foundations increased their support for more moderate organizations like the NAACP and the National Urban League44.

This strategy of co-optation also explains the heavy funding and support by major foundations for the environmental and conservation movements, which originally – and still in their more radical arms – represent very direct, fundamental threats to the existing social order. Thus, today the environmental movement is dominated by large institutions like the World Wildlife Fund, Conservation International, Resources for the Future, World
Resources Institute, the International Union for Conservation of Nature and Natural Resources (IUCN), and the Nature Conservancy, among others. Most of these institutions at some point depended upon financial support from major foundations, and today representatives from the corporate and financial world largely dominate their boards. Most of their funding comes from corporations, with whom they engage in “strategic relationships.”

Such has also been the relationship between major foundations and the so-called ‘anti-globalization’ movement. As globalization became the dominant force of the world from the 1990s onward, new movements began to spring up all around the world, opposing various policies, programs, institutions and ideologies embedded within the process of globalization. Major targets for anti-globalization activists and organizations had been the World Trade Organization, the G7/G8 meetings, the World Bank and IMF, among others. Major protests at the annual gathering of these institutions – notably at the 1999 World Trade Organization meeting in Seattle – began to strike fear into the minds of the global elite. As The Economist noted in 2000, despite the differing views and backgrounds of activists and protesters in Seattle, what they “have in common is a loathing of the established economic order, and of the institutions – the IMF, the World Bank and the WTO – which they regard as either running it or serving it. “This ‘new kind’ of protest, noted the magazine, “is more than a nuisance: it is getting in the way.”

A reaction to this development was seen in the formation of the World Social Forum, an annual meeting of NGOs and various civil society organizations acting as an alternative to more radical, protest-oriented and revolutionary movements and advocacy, and instead promoting the discussion of “reforms” to globalization. Many governments and political parties, and, notably, the Ford Foundation have provided funding for the World Social Forum. As Lisa Jordan of the Ford Foundation explained: “Governments, business and civil society cannot solve problems separately. There must be dialogue between and amongst these three groupings. The WSF is an attempt to support a vast and complex array of public space for an integrating world.” Again, the objective is to ‘integrate’ the opposition to the existing social order within the social order, to give the ‘rebels’ a seat at the table, and thus, undermine the rebellion itself.

While reforms and evolutionary change can produce good and real results, they do not keep pace with the ever-expanding militarism, war, environmental degradation, economic and financial destruction, corporate colonization, manipulation and devastation of biodiversity, impoverishment and exploitation of the world’s masses, and the ever-growing concentration of wealth and power in the hands of very few institutions and individuals at the global level. The human species – and the planet itself – do not have the time to await the slow changes begrudgingly afforded by the institutions of empire, exploitation and domination. Reform has its place, but radical – transformative – change is of the utmost necessity in order to not only challenge the existing order, but to create alternatives to it – and to help make the existing order obsolete, so that humanity may chart a path that does not lead to eventual extinction, as our current trajectory indicates.

This is where ‘Voice of Access: The People’s Foundation’ – and organizations like it – can play a much-needed role.

A ‘VOICE’ FOR THE PEOPLE, A ‘FOUNDATION’ FOR CHANGE

The establishment of ‘Voice of Access: The People’s Foundation’ (TPF) represents an attempt to create a counter-hegemonic foundation, to follow familiar patterns of facilitation, patronage, exchange and interaction, the formation of new organizations, the construction of knowledge, support for social movements, connecting intellectuals, activists and communities. The objective and methods of these efforts will counter those of the dominant hegemonic foundations, however, in a few pivotal ways.

First, TPF does not have a substantial financial base upon which to leverage projects and steer the focus of other organizations. In fact – at present – the financial standing of the Foundation is non-existent. Currently, it is still in the starting stages of constructing a legal entity, and those of us who are working to create the foundation are attempting to look into various methods of financing, including approaching the traditional grant procedures, as well as exploring alternatives for specific project financing via crowdfunding measures through social media, and also encouraging donations from supporters around the world. Financial considerations – at present – aside, TPF does not expect to ever match the financial resources of the large foundations created and operated by the world’s financial oligarchs. As such, our focus is to be more on facilitation as opposed to funding, though we do hope to increase the amounts of money we can put into projects over time.

What is the role of a facilitator foundation?

To describe the role envisioned for the foundation, it would be best to give some examples of projects that are being planned over the coming years. One key
project with which there is a great interest and necessity is in building connections around the world between activists and organizations seeking to promote transformative changes in the social order, whether domestically or internationally. An example of this type of engagement is a project to work with the Mpambo Afrikan Multiversity based out of Uganda.

The founding president of Mpambo Afrikan Multiversity is Paulo Wangoola, an indigenous scholar and intellectual in East Africa. As Wangoola wrote, "The Multiversity is a post-colonial concept of higher learning of the oppressed, by the oppressed and for the oppressed, in pursuit of their community cognitive autonomy and security," further noting that, "when Europeans colonized the world, they also colonized other people’s knowledge,” which continues under the concept of the modern university (which, I might add, was exported to Uganda and East Africa through efforts by the Rockefeller and Ford Foundations). In contrast, the ‘university’ has extended from the West into Africa “as a colonial/neocolonial design” which has advanced Western hierarchical knowledge structures at the expense of “the total eclipse of Afrikan indigenous thought, scientific knowledge, philosophy, spirituality, wisdom and epistemology; that is, the knowledge base developed over millennia, by the Afrikan Black Nation, as a self-determined people.”

The concept of the ‘Multiversity’ – on the other hand – "is based on the proposition that the people of the world and their knowledges, cultures, language and epistemologies are horizontally ordered, such that each of the knowledges is valid in itself.” This understanding of people and knowledge “is derived from Afrikan spirituality, worldview, scientific thought and ontology, by which all being and phenomena, spiritual and material, natural and supernatural, manifests itself complementally in sets of twos, female and male... balance, harmony and reciprocity.” Thus, wrote Wangoola, “each one of the world’s knowledges deserves some ample and adequate space, and resources to be advanced to its farthest frontiers, as well as to be enriched by, as it itself enriches, other knowledges, through cross-fertilization.”

The Multiversity is focused on “creating some democratic intellectual space and elbow room for oppressed peoples to make and demonstrate a case for a MULTIplicity of epistemologies, thought and knowledge to blossom, as a necessity to vitalize each of the world’s knowledges, as well as the totality of human knowledge as a whole.”

Mpambo Afrikan Multiversity, more specifically, "is a community-based institution of mother tongue higher learning, centered around persons who are considered by their peers and community to be compelling experts; wise men and wise women, philosophers, sages, scientists, scholars, innovators and the highly talented. They may be primarily indigenously trained or primarily Western-trained, but both are embedded in their community, have emerged out of their people’s struggles to be free [...] organic intellectuals, scholars and scientists.”

The word Mpambo – in the Lusoga dialect spoken by the Basoga people at the Source of the Nile in Uganda – means ‘the best seed, the most potent seed selected at the time of harvest for safe custody, for propagation in subsequent good seasons’. Mpambo Afrikan Multiversity aims "to help raise and nurture a critical mass of a world class of itself of intellectuals and scholars to three principal goals: to create capacity for a people's socially necessary knowledge to be created close to that people and amidst themselves; to help render people to be both creators and consumers of knowledge; and to build effective capacity for Afrikan peoples to learn from themselves, and on that basis to learn intellectually, philosophically, scientifically and technically from and with the other world’s spiritual, philosophical, scientific and academic traditions and practices.”

I was fortunate enough to have spent a little time in Uganda with Mpambo Afrikan Multiversity roughly seven years ago, when I was given the responsibility by Paulo Wangoola of recruiting some young Westerners to return to Uganda in order to study and work with Mpambo, and to build up connections between the young, emergent leadership of Mpambo, so that these connections may last for generations to come. This is where there is great potential for TPF to engage in facilitation and the construction of new knowledge networks, to provide a forum and means of exchange. Our initial project is to go to Uganda and spend roughly two months learning from the organization, documenting and discussing the activities, objectives, and establishing a means for advancing future cooperation and interaction between Mpambo and TPF.

Unlike hegemonic foundations, which approach social movement organizations and centers of knowledge with an objective to steer such organizations in a specific direction, to act as patron and paterfamilias, the People’s Foundation approaches Mpambo Afrikan Multiversity with an objective to learn, to receive guidance, to listen, and to mutually discuss and agree upon methods and purposes of future cooperation and support. This represents a horizontal approach to facilitation and support, as opposed to the vertical (and hierarchical) approach undertaken by hegemonic foundations. We will of course be approaching Mpambo with ideas of potential cooperation — including the possibility of facilitating exchanges between African
and Western intellectuals and other Indigenous peoples and communities from around the world. Ultimately, this is the type of role as facilitator that the TPF envisions for itself among many different organizations and communities.

Hegemonic foundations have achieved immense success in providing forums for the establishment of consensus between elites, both nationally and globally, so as to effect a more precise, permanent and stable system of domination and control. The counter-hegemonic People’s Foundation aims – in the long-term – to help facilitate interaction, communication, cooperation and coordination between groups of activists, intellectuals and other counter-hegemonic groups around the world.

The world is in the midst of powerful transformations and changes. Power is globalizing like never before, with more wealth than ever previously existed being concentrated in fewer hands than ever before, with structures and ideologies of dominance and governance being institutionalized not only at national, but also regional and global levels. A corollary of this process is that of the ‘globalization of resistance and revolt.’ From Tunisia to Egypt, Israel to Turkey, Greece to Spain, Indonesia to China, South Africa to Brazil, Chile and the Canadian province of Quebec, to the Indigenous movements across North and South America, Africa and Asia, to peasant and labour resistance and militancy, the world is in the early stages of forming a truly global resistance to the processes, institutions and ideologies of domination (which have, in no small part, been constructed and institutionalized through the efforts of hegemonic foundations).

While these protests, movements and methods of resistance around the world appear disparate and often disconnected, there is enormous potential for mutual understanding, cooperation, coordination and support. TPF hopes to play a role in attempting to connect and facilitate interactions, exchanges, conferences, and creating supporting organizations to help turn the concept of ‘solidarity’ into a solid practice. For example, imagine the possibilities of holding an international conference of activists, intellectuals and organizations involved in resistance movements to meet, discuss their respective struggles and objectives, and to find meaningful possibilities of collaboration and coordination, to establish new organizations – think tanks, media centres, educational organizations, etc. – which would represent the combined interests and activities of these seemingly-disparate groups.

The other major aspect of the TPF – the Voice of Access – reflects a priority in making information readily available to the broadest possible audience, through collaboration and publication of texts in multiple languages, offering reduced rates to schools, community groups, low-income organizations and researchers and finding ways of distributing the information – particularly through digital formats – as well as in print. The ‘Voice of Access’ moniker and meaning reflects a focus on expanding and facilitating access to information, communication and interaction. This will necessitate an increasing focus on access to and utilization of technology itself. While we take for granted our information and communications technology in the West, much of the world continues to lack access to these materials. Voice of Access would seek to find ways of helping to improve and facilitate increased access to such forms of technology, let alone the information and communication they help facilitate.

Student activism and militancy has been on the rise across much of the world, including notable examples in recent years from Greece to the United Kingdom, Chile and Quebec. In each case, students have been mobilized in opposition to the ever-expanding process of the neoliberal restructuring of the educational system: increased privatization, corporatization, leading to increased tuition and debt for prospective students, which has the dual effect of making education harder to attain, and for those who do pursue education, the effect is to shackle them through debt servitude to the social order itself; focusing their energies – upon graduation – to getting jobs so that they can pay off their debt, instead of channelling their intellectual capacities and energies into finding alternatives to the existing system.

One long-term objective of TPF would be to help facilitate the development of connections and coordination between student movements and struggles around the world. A good starting place would be to invite not simply leadership but also participants and supporters of various student movements to participate in a conference where they could discuss their respective experiences, successes and failures, prospects and potential. Through such interaction and the development of interpersonal relationships, new ground could be broken on building support between student movements around the world, new organizations could be established to promote the sharing and development of knowledge between students and youth movements, with cooperative thinks tanks, media centres and similar organizations with a focus on advancing understanding, public awareness, and coordination about and between youth/student movements.

TPF would have an equal interest in promoting, supporting and encouraging similar processes for activists and movements around the world. Our objective is not to be at the centre of these processes, nor to become a ‘hegemonic’ institution in its own right,
but rather, to attempt these initiatives and projects – and to learn from their various successes and failures – in the hope that others may build upon this and attempt similar, parallel and mutually-supportive projects. In short, it would be far more effective and beneficial to all if there were a multiplicity of similar organizations to the Voice of Access pursuing similar and parallel objectives, as opposed to simply one. These are ultimately long-term objectives, and the reality of current non-existent funds means that our initial steps will have to be small and slow. Thus, our primary aims in this area will be toward establishing channels of communication and informal relationships with activists, intellectuals and social movements locally, nationally, regionally and globally, slowly and steadily.

TPF will look to the world with a focus on attempting to understand and share knowledge regarding the true nature and structure of our global socio-political and economic order: the institutions and ideologies of power and domination, as well as the methods and movements of resistance. We will look to this situation with a focus on examining what appears to be missing, what appears to be needed, and to try to provide what we can to address these concerns. As such, the educational and media endeavours of the TPF are essential.

In this regard, there are two organizations that TPF has an interest in helping to establish. One – tentatively named the General Research Association for the Study of Power (or GRASP) – would be focused on bringing together young scholars and intellectuals into a cooperative organization functioning like a think tank, which would be dedicated to the study of institutions and ideologies of power and domination: the State, corporations, banks, investment facilities, international organizations/bodies, hegemonic think tanks and foundations, universities/schools, the media, military, public relations/advertising industry, etc. GRASP would aim to undertake extensive and rigorous research and study of these and other institutions and the ideologies that pervade them, historically, presently, and with a focus on trends and transformations in their future development. We are, ultimately, a society dominated not by a single institution but by many, each with their own hierarchies, structures, histories, evolution and ideologies. Yet the institutions, which dominate society as whole, do so on a largely cooperative basis.

For example, the educational system supports the development of intellectuals who are channelled into think tanks and foundations, where they engage in the construction of knowledge, development of strategies, social engineering, and the formation of foreign policy; from there they are channelled into the state apparatus to enact policies. Corporations and financial institutions, in turn, dominate the governance structures of universities, think tanks and foundations, and participate in the development of strategies, policies and ideology. Thus, while theoretically these are separate institutions, functionally they are interconnected and interdependent. The purpose of GRASP and its research would be to study the historical evolution of these various institutions, and their interconnections and interdependencies with other institutions, including by mapping out their shared leadership with other institutions. The objective is to establish a think tank that may ultimately provide a source of knowledge-generation promoting a more comprehensive and coordinated understanding of our present global order.

TPF would simultaneously seek to support the dissemination of knowledge produced by GRASP, through building connections with alternative media sources, as well as pushing the knowledge into the mainstream, or, if necessary, helping to establish new media organizations or groups dedicated to the dissemination of this knowledge. GRASP would be an incredibly useful resource for scholars, researchers, journalists and interested individuals and groups around the world. Its focus would primarily be on studying and understanding the principal Western institutions of domination, and thus provide a valuable source of knowledge for others to consult.

A parallel organization to this would be a similar think tank/research organization, which would be dedicated to the study and discussion of social movements and methods of resistance around the world, historically and presently. The aim, once again, would be to connect young scholars and intellectuals in a cooperative organization, which would initially establish a regional focus-approach to the study of social movements. For example, it would be the job of one (or a few) of the scholars to focus exclusively on analysing the present social movements, rebellions, revolutions, riots and methods of resistance across sub-Saharan Africa; others would be focused on North Africa and the Middle East, Continental Europe, East and Southeast Asia, North and South America, etc. The young scholars, examining the current state of a ‘world of unrest’, could prepare monthly reports. Such an organization could become an immensely useful resource for researchers, intellectuals, journalists and interested individuals, seeking to provide a single source whose primary focus is on studying the various social/resistance movements around the world.

This is a needed resource in the world today. There are several media and research groups that focus...
exclusively on studying social/resistance movements, but the focus is often inconsistent, and the sheer scope of global unrest and resistance is monumental. However, an organization with a focus on studying not simply what protests are ‘popular’ and in the press more frequently than others, but rather, on examining the multiplicity of resistance movements around the world, is a needed resource to both expand understanding of the current state of global unrest, as well as supporting those social and resistance movements. How can the people of the world – especially those actively engaged in resistance – support each other if they don’t even know about each other’s respective struggles? This organization would be dedicated to the construction and dissemination of knowledge regarding the methods and movements of resistance taking place around the world, presently and historically. Here, the Voice of Access could play a part in helping to provide a voice for those who frequently go unheard in the Western world.

Such an organization would greatly help our understanding of resistance and revolution itself. With such a large focus and source of knowledge, we would be able to see larger patterns and processes, gain a better understanding of the conditions and ‘sparks’ that lead to differing social movements; to better understand the successes and failures of resistance movements; and through the raising of public awareness – to encourage active and future support for resistance movements.

For both GRASP and the as-yet unnamed research organization focused on studying global resistance, the objective for the People’s Foundation would be to bring different scholars, activists and related organizations together, in a cooperative and horizontal (i.e. non-hierarchical) structure, with a focus on undertaking extensive and rigorous research (held to academic standards), to produce research reports, articles for dissemination, books, host meetings/conferences, media consultations, educational seminars and gatherings, providing a source of important and needed knowledge to be shared as widely as possible, to undertake the dual task of advancing human understanding of the social order which dominates our world, and of the people around the world who are resisting that order’s various manifestations.

For ‘Voice of Access: The People’s Foundation’, the methods would be geared towards reaching out to young scholars and interested individuals and organizations, to begin a process of communication and consultation on the formation of these two organizations, to connect these individuals and organizations and hopefully – if possible – to provide the initial funding needed to establish the organizations.

**PROBLEMS AND PROSPECTS**

There are, of course, many present barriers to all the current objectives – short and long-term – of Voice of Access: The People’s Foundation. The most obvious is the financial impediment. While TPF ultimately seeks to function as a counter-hegemonic presence with an aim towards building alternatives to the existing global social order (making present power structures obsolete), the Foundation must still operate within the existing social order. That means that, internally and legally, it must establish itself as an NGO, with its own internal hierarchy and legal structure, and, more problematic, it must seek to accumulate funds to support projects, as well as to build up a financial base capable of supporting the Foundation’s staff itself, so that we may dedicate our time and resources to the activities of the Foundation. These are obstacles which we have yet to overcome in any meaningful sense, but, through the articulation of some of our short and long-term goals and objectives, we hope to encourage support – both material/financial and otherwise – to helping Voice of Access: The People’s Foundation establish itself and begin its important work in the world.

The major hegemonic foundations have been essential and effective institutions in the process of shaping education, constructing knowledge, disseminating information, creating institutions, establishing consensus between elites – nationally and globally – and institutionalizing ideology for the benefit of the hegemonic financial and corporate interests of the world. They have operated through long-term social engineering projects to try to establish social control: to connect elites, to co-opt and deflect resistance, to promote reform and slow adaptation, so as to ultimately secure the stability of the existing social order, and the hierarchies of inequality and oppression which dominate it.

The counter-hegemonic TPF hopes to become an effective organization for the purpose of finding new means and processes of education, the construction and dissemination of new forms of much-needed knowledge, to connect people and communities – activists, intellectuals, individuals and groups – not elites, to support the growth and interconnections (and radicalization) of social movements – not to co-opt, but to cooperate – with the ultimate objectives of challenging the prevailing social order, and sowing the seeds for future generations to construct a new order, making the existing one obsolete. These are large objectives, but as with any goal, it all begins with small and slow steps in the right direction.

With an understanding of the role that has been played by hegemonic foundations in the preserva-
 Revolution is a process, not an event, and it requires one to operate within an existing social system while simultaneously challenging that system. This is a multi-generational process, and we must begin thinking and acting with a focus on the short- and long-term.

Voice of Access: TPF hopes to take such a short and long-term focus on encouraging and supporting social transformation for the benefit of humanity and the world as a whole, not simply the powerful few who rule over it. This requires building connections and facilitating support with groups and people around the world, to advance access to technology, communication and interaction, to be a 'voice' for those who go unheard, a foundation for people, a foundation for change.

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2 Idem: 46-47.
5 Idem: 235-236.
7 Idem: 237-238.
10 Idem: 181.
11 Idem: 182.
13 Idem: 194.
15 Idem: 122-123.
17 Idem: 416.
18 Idem: 438.
38 Idem: 319.
41 Idem: 819-820.
48 Idem: 29.
MICRO-PROJECTS IN A MACRO WORLD:
HOW TO ENSURE NON-PROFIT INTERNATIONAL DEVELOPMENT PROJECTS SUCCEED WHERE OTHERS FAIL

RICK MCKENNY

Rick is passionate about implementing large-scale change in our society for social and economic justice, including the interaction between economics, politics, for local and developing world economies. He is the co-founder of Water for Humans, a social venture enterprise that strives to provide sustainable, appropriate technological solutions to the world’s water and sanitation crisis while insuring local public control of water resources. Prior to obtaining his MBA in June 2007 in Sustainable Business Practices from the Bainbridge Graduate Institute (BGI) in Seattle, Rick was a physicist and materials scientist for eighteen years at Boeing, working on classified projects. Recently, he spent four years in Vancouver, BC at Ballard Power Systems, as a Senior Materials Engineer developing hydrogen fuel cell technologies. His direct experience includes product research and development, supplier development, one-piece flow operations, project planning and management. He is particularly gifted with innovative design of appropriate technological solutions. Rick also successfully operated his own business that he started while in high school and subsequently sold to focus on his undergraduate degree in Solid State Physics and Mechanical Engineering. Since graduation from BGI, he is committed to applying his engineering and business skills to environmental, economic and social justice causes.

Appropriate technology has long been the favoured approach of International Development groups working with the poorest communities, but appropriate technology is not a panacea. Many such projects have failed. Introducing technological solutions to social problems is more likely to succeed if the technology serves social needs, addresses constraints, and enlivens the cultures of local communities. How, then, can appropriate technology be successfully introduced to a community that might otherwise be resistant to something new and unfamiliar but potentially beneficial? In this paper, we discuss a development project introducing energy-efficient cook-stoves (La Mazateca) in rural Mexico and explore the causes of challenges we encountered — and successfully resolved — through a partnership with another NGO. We conclude that such strategic partnerships can create synergistic relationships that make possible that which would be impossible for either to achieve independently.

BACKGROUND

The Sierra Mazateca region of north-eastern Oaxaca, Mexico (2400 km²) is home to the indigenous Mazatec people living in 1,000 mountain communities nestled in a remote rainforest. They first moved into the region in the 16th century to escape the Aztecs and the Spanish conquistadores. Once settled, they farmed, clearing the steep forest to plant corn and beans. However, as their population increased and colonial rule introduced taxes and forced labour in the region, more forest had to be cleared to sustain the growing communities. After Mexico’s independence from Spain, another wave of these immigrants moved there when they could not secure land rights under the new Mexican government.

Given the steep terrain, poor soil, and geographical isolation, the inhabitants of the region relied on subsistence farming and cash-crop coffee production for their economic survival. Prior to the 1970s, the quality and quantity of coffee produced in the region was considered excellent. In the late 1970s, the International Monetary Fund (IMF) and the World Bank shifted their focus to non-traditional coffee growing regions in Southeast Asia and sub-Saharan Africa. Central America was not included in this program. Consequently, the region was left behind with a low-quality product for which there was little demand.

Given this history of both neglect and unfavourable policies made by distant rulers—governments, it is no surprise that in the early 21st century, residents distrusted outsiders. In 2012, Water for Humans (WFH) met The Hunger Project (THP) and learned about their ongoing work in the Mazateca. The region is one of the more impoverished places in the world. Mexico’s rising tide of economic development has passed it by. Modern infrastructure is virtually non-existent: many inhabitants have no access to electricity and year-round water. None have internet, telephones, cell phones, or computers. Few speak Spanish and few are literate. Nearly 80% of the community income comes from government aid. Coffee

APPROPRIATE TECHNOLOGY HAS LONG BEEN THE FAVOURED APPROACH OF INTERNATIONAL DEVELOPMENT GROUPS WORKING WITH THE POOREST COMMUNITIES, BUT APPROPRIATE TECHNOLOGY IS NOT A PANACEA. MANY SUCH PROJECTS HAVE FAILED. INTRODUCING TECHNOLOGICAL SOLUTIONS TO SOCIAL PROBLEMS IS MORE LIKELY TO SUCCEED IF THE TECHNOLOGY SERVES SOCIAL NEEDS, ADDRESSES CONSTRAINTS, AND ENLIVENS THE CULTURES OF LOCAL COMMUNITIES. HOW, THEN, CAN APPROPRIATE TECHNOLOGY BE SUCCESSFULLY INTRODUCED TO A COMMUNITY THAT MIGHT OTHERWISE BE RESISTANT TO SOMETHING NEW AND UNFAMILIAR BUT POTENTIALLY BENEFICIAL? IN THIS PAPER, WE DISCUSS A DEVELOPMENT PROJECT INTRODUCING ENERGY-EFFICIENT COOK-STOVES (LA MAZATECA) IN RURAL MEXICO AND EXPLORE THE CAUSES OF CHALLENGES WE ENCOUNTERED — AND SUCCESSFULLY RESOLVED — THROUGH A PARTNERSHIP WITH ANOTHER NGO. WE CONCLUDE THAT SUCH STRATEGIC PARTNERSHIPS CAN CREATE SYNERGISTIC RELATIONSHIPS THAT MAKE POSSIBLE THAT WHICH WOULD BE IMPOSSIBLE FOR EITHER TO ACHIEVE INDEPENDENTLY.

BACKGROUND

THE SIERRA MAZATECA REGION OF NORTH-EASTERN OAXACA, MEXICO (2400 KM²) IS HOME TO THE INDIGENOUS MAZATEC PEOPLE LIVING IN 1,000 MOUNTAIN COMMUNITIES NESTLED IN A REMOTE RAINFOREST. THEY FIRST MOVED INTO THE REGION IN THE 16TH CENTURY TO ESCAPE THE AZTECS AND THE SPANISH CONQUISTADORES. ONCE SETTLED, THEY farmed, CLEARING THE STEEP FOREST TO PLANT CORN AND BEANS. HOWEVER, AS THEIR POPULATION INCREASED AND COLONIAL RULE INTRODUCED TAXES AND FORCED LABOUR IN THE REGION, MORE FOREST HAD TO BE CLEARED TO SUSTAIN THE GROWING COMMUNITIES. AFTER MEXICO’S INDEPENDENCE FROM SPAIN, ANOTHER WAVE OF THESE IMMIGRANTS MOVED THERE WHEN THEY COULD NOT SECURE LAND RIGHTS UNDER THE NEW MEXICAN GOVERNMENT.


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is still the primary cash crop, despite greatly reduced quality. The educational system offers limited instruction beyond the basics, and little accurate information reaches the community about the rest of the world. In short, the Mazatec we encountered were a people left behind.

It was in this history of betrayal by outsiders that we set out to address the problem of deforestation. The continued reliance on the forested terrain for corn, bean and livestock farming had contributed to deforestation in the region, and the use of firewood for cooking was taking an even greater toll on the tropical forests – and on human health. Women and girls cooked over traditional open, three-stone fires fuelled by wood and suffered chronic respiratory health problems. Because the Mazateca dry season can last up to 4 months, and coffee production is an important source of income, maintaining an intact forest canopy is critical for retaining groundwater and for effective coffee production. During the dry season community members hike up to 2 hours, each way, over treacherous mountain terrain to collect their daily water.

Our approach was straightforward: if we could successfully introduce an innovative cook-stove that required less fuel wood, we could decrease deforestation and increase the forest’s groundwater during the annual four-month drought. High efficiency clean cook-stoves could also reduce the amount of time women spent cutting and gathering wood and reduce respiratory disorders among the families – if we could encourage them to adopt the new technology.

Even with the long history of distrust of outsiders, we hoped to co-create, demonstrate, and subsequently persuade the communities to adopt better technology and continue to use the stoves long after they were built. Our task was a challenge. Our own resources were limited, and our expertise in the region was scant. However, in less than 6 months, 89 La Mazateca stoves were in use in 4 micro-project communities. Women were satisfied and reported spending half as much time gathering wood and that their health had improved significantly. The La Mazateca cook-stove can boil 5 litres of water in 13-18 minutes on less than 600gm of firewood, as compared boiling the same amount of water in 45-60 minutes using 1.5-2 kg of firewood. We also addressed drinking water safety and groundwater contamination challenges by introducing urine-diverting composting latrines, rainwater harvesting, and bio-sand water filters.

What made the project successful went far beyond appropriate cook-stove technology. Success was rooted in the value of the partnership we had established with another NGO. This NGO has a solid record of accomplishment of empowering people worldwide. In this paper, we discuss how we forged the partnership that enabled us to achieve what neither organization could have achieved on its own, and in so doing, successfully work with these Mazatec communities.

THE PARTNERSHIP

Water for Humans is a Seattle-based not-for-profit organization incorporated in 2008 with the mission of providing low-cost clean water and sanitation solutions to underserved populations in order to ensure that water remains a local, public resource. We have been working in Mexico since 2009. Our current partners are the Institute for Nature and Society Oaxaca (INSO), The Hunger Project – Mexico (THP), and four communities of the San Jose Tenango region (144 km2) of the Mazateca. Our programme areas are determined by issues identified by the communities with whom we work.

Our organization excels at designing appropriate technologies and developing and conducting workshops on their use. But in this case, we lacked both ties to other stakeholders and the cultural background necessary to work in this region. When we began collaborating with THP to co-create a community project, we knew that working in the Mazateca would be extremely challenging.

The THP was established in 1977 as a global non-profit organization and has been working globally since then to alleviate poverty and hunger through local empowerment. THP’s partners include Oxfam, The World Bank, and the United Nations. In addition, ten partner countries conduct extensive fundraising efforts to support THP’s global programs. THP’s Global Council consists of public personalities committed to ending poverty, such as Nobel Laureate (1998) Amartya Sen, former Secretary General of the UN Javier Perez de Cuellar, and Princess Noor of Jordan.

When we first met, THP had been working in the country for nearly three decades. In 2010, they began work in the region surrounding the municipality of San Jose Tenango, in the Mazateca, with the support of the Priority Areas Care Program under the Ministry of Social Development. THP then helped facilitate participatory development exercises with 20 communities (of more than 150) in order to assess the local social and cultural context. The exercises revealed divisions within each community, a long history of gender discrimination that marginalized women, and an exodus of young people fleeing their rural communities for education and jobs.

THP’s follow-up Participatory Rural Appraisal (PRA) revealed that the communities were most concerned...
about access to water, nutrition, shelter, and infrastructure. THP’s continued presence had gone far to establish rapport with the people and provide insights about how their culture and belief systems could either impede or facilitate development. THP also understood the need to provide communities with tangible projects that could help pull them out of poverty. However, THP lacked the technical capacity to adequately address this need. A technological solution was what WFH could provide.

**OUR PROJECT**

We decided to launch a pilot project in four of the communities where THP had focused its efforts. Given THP’s experience and knowledge of local power relations, they organized a series of meetings with community leaders – including women. We understood that women would be required to plan and implement the project for three reasons:

1. Women were the primary collectors and users of firewood;
2. Women had been marginalized by the long-standing system of patriarchy;
3. Decades of failed development projects demonstrated that the absence of women in a project is likely to cause failure, because they tend to control the domestic economy.

After leading focus groups, community meetings, and ethnographic assessments, better cook-stoves were chosen as the appropriate starting point. Previous efforts to provide appropriate technology cook-stoves had failed. Those stoves were poorly constructed, cooked inefficiently, became infested with nesting insects, and could not be repaired with local expertise. In addition, to avoid the flaws of past efforts, women wanted to save fuel, funnel smoke out of their homes, and prevent children from being burned.

WFH, THP, and community members decided to start with the construction of two demonstration stoves to allow women to assess their effectiveness. WFH designed a stove to meet community criteria. WFH consulted with the women before, during, and after building the demonstration stoves. One example of this is the proposal to build stoves so that the cooking surface would be at waist height for the average Mazatec woman – much like the average US or European stove. However, the women said that they wanted the surfaces much higher – even if they could not see inside their taller pots. We created a mock-up so that they could stand in front of it and determine the correct height. Much to our surprise, they wanted their cooking surfaces at the higher level. The women approved the design, along with other modifications to meet their needs. From this experience, we learned to assume as little as possible and to demonstrate as much as possible.

Subsequently, 89 families from the four communities came together to acquire the financial resources to build the stoves. To enable the communities to continue any financial relationships after international project leaders stepped back, they were provided practical training to develop confidence and exposure to the outside financial world. The communities took on ownership of the project by organizing to meet with officers from Mexico’s HSBC bank. One of the steps was a Skype meeting, but this Skype meeting was unlike any Skype meeting in which readers of this article might participate. Prior to their presentation, the representatives, both male and female, spent hours preparing the arguments that would allow them to articulate their needs, strategies, and commitments. To attend the Skype meeting, participants had to leave their families and fields for a full day of travel to get to a location with a fast, reliable internet connection. This required a pre-dawn hike out to the nearest dirt road, taking the local colectivo taxi, and then a bus ride.

After funding was approved, we began assembling suppliers and materials and a schedule for the construction workshops. The communities nominated 14 “Promoters” (stove builders) that included both women and men. The Promoters were trained and subsequently paid to construct the new stoves. All the materials were locally sourced. Two training workshops, 4-5 days each, were scheduled, and a distribution and storage network was established to transport the materials to the individual households where each stove was to be built.

Guided by the experience and expertise of THP, we evaluated the project in its early, middle, and late stages using specific criteria or markers. We knew that “success” could be defined in many ways. By expanding on the “Toyota 5 Whys” principle, we established the following markers and determined that when they had occurred, we could continue to next steps:

- Effective process for the community and for us;
- Effective visioning and prioritizing workshops;
- Did commitments of the community members’ waiver, when and why;
- Effective funding procurement process;
- Effective collaboration of NGO’s and community;
- Ability to inventory and track all of the material;
- Process to deal with lost, stolen or misplaced materials;
- Effective logistical plan for distribution;
why it is useful. In many cases, persuading people to adopt new technologies will require challenging and understanding how the new system operates and the timing of the initial introduction of the new technology is also key for successful implementation. By involving community members in all phases of planning, the members are able to learn project, they can be replaced.

These markers were reviewed at several stages in the process. The resulting information enabled us to take corrective action and keep the project moving ahead.

LESSONS LEARNED

To suggest that this project was smooth and had minimal upsets would over simplify our experience. We encountered a number of unanticipated impediments that would have resulted in failure had it not been for the cultural fluency of THP planners, the technological capabilities of the WFH team, and the enthusiasm and perseverance of the community members.

For example, we knew that success was contingent on building a reliable and robust supply chain. There were many obstacles. Delivery of supplies could be hampered by any number of factors: communities were remote; roads were inadequate for large trucks to navigate; and secure storage and distribution facilities had to be found for the supplies. We had to design a distribution process that would reach the communities and individual households, while protecting the materials from rain and inventory control problems since materials could be ruined or pilfered all along the way. By implementing an accurate inventory system and keeping both our team members and community members accountable for all the supplies, we were able to ensure that everything arrived properly.

Any implementation team needs to also evaluate the interests and capacities of community installation partners. If supplies are sourced locally, one must constantly evaluate the pricing structure and reliability of the individual suppliers, as well as how much confidence the community has in them. Given the tenuous nature of many business enterprises in the developing world, it is necessary to have multiple sources available at all times to accommodate unexpected disruptions. In addition, all suppliers must understand that they are a critical part of a larger program, and if they are not fully committed to the project, they can be replaced.

The timing of the initial introduction of the new technology is also key for successful implementation. By involving community members in all phases of planning, the members are able to learn and understand how the new system operates and why it is useful. In many cases, persuading people to adopt new technologies will require challenging the existing cultural norms, historical practices, and preconceived notions and ideas. For appropriate technology implementation, the entire team needs to also work closely with all members who may be indirectly involved in, and/or resistant to, the project. During the Mazateca micro-project, we revisited each household to ensure they were using the technologies appropriately. We listened closely to the feedback of family members regarding their expectations. In the process, the best outcome occurred when several community members were trained in the proper use of the technology and then shared their skills with other community members.

The team must also define what success means to them. Pilot projects are critical to assessing the systems and readiness of the community to proceed. Success is not necessarily measured by the acceptance of a specific technology: a successful outcome may be the bridging of the socio-political boundaries in order to work collaboratively. Pilot projects allow both NGOs and community members to better understand the strengths and weaknesses of the project and to plan for future projects. Pilots also enable the team to better understand the constraints and opportunities in the community. After implementation of a pilot project, the team must allow sufficient time to let the community gauge its effectiveness and identify modifications to be made.

ISOLATED ECONOMIES

Because isolated communities typically lack effective means of accessing markets, their ability to export goods and services that would provide cash income is severely limited. In a cash-based economic system, imports and exports must be balanced to be sustainable. Specifically, the money, goods, or services that leave a local economic system must be matched by the money, goods or services entering the community. In addition, isolated communities often lack the infrastructure to develop and expand export opportunities. In the Mazateca, a significant portion of cash income comes from government support. This money is then spent on goods and services from outside the community, such as food and transportation. However, the community does not export sufficient goods and services to bring ‘new cash’ into the community. In order to grow economically, small communities must increase their ability to export value-added goods such as coffee, harvested herbal medicine, and services.

In addition to the cash-based economy, there is a strong shadow economy (non-cash-based economy, including illicit trade), where goods and services
are directly traded among community members. Development workers can gain a better understanding of how a shadow economy might affect project success by being aware of its existence and forging social ties with the local community and professionals with deep knowledge of the area.

Leverage points exist for improving livelihoods in rural communities. These leverage points include increasing the community’s ability to export high-value goods or services such as herbal medicine, eco-tourism, and sustainable natural resources. Another is providing skilled jobs for individuals. For example, the La Mazateca stoves were built on-site with local materials and local labour, instead of being produced in a large economic centre and importing the finished product to the community. Our stove design used local materials, such as volcanic perlite that is abundant in Mexico. By employing local labour, using local materials and transport, and constructing the stoves on site, we injected cash that could then circulate in the community and reduce economic leakages.

However, as the local economy improves, economic inequalities may ensue. Organizations must take into account that creation of new employment and cash flow may disrupt the community status quo. For example, the newly employed Promoters may have personal cash for the first time in their lives with no safe place to store it. In addition, the team must be sensitive when employing women in male-dominated societies. Women must be able to control and safely store their income.

Another common issue is the use of volunteer labour, such as adults or teenagers on holiday who pay an organization for the cultural and educational opportunities of working in a foreign community. While volunteers may be helpful in promoting an organization in its home region and lowering project costs, their use can have negative effects. Their generous service may decrease local employment opportunities and reduce self-reliance within the community. Because one of our goals is to provide sustainable economic opportunities, we do not use volunteers for any tasks that can be done by community members. Community members may already possess or want to learn skills such as photography or conducting video interviews; assisting the NGO in documenting their process or training other community members. Thus it is imperative to engage community members rather than foreign volunteers.

**DISCUSSION**

WFH’s successful work with La Mazateca stoves has set the stage for significant change in the Mazateca. Teaming with THP allowed WFH to achieve its overall goals: 1) protection of the watershed; and 2) greater self-sufficiency within the Mazatec community towards ending the cycle of poverty that has prevailed for generations.

Both THP and WFH projects are built on the premise that collaborating organizations must co-create the community engagement process. We encourage strengthening community capacity building, and support them with technological expertise and facilitate exploration and understanding of potential technological solutions. Many communities, long accustomed to rudimentary technologies that no longer serve current cultural and environmental demands, may not realize the scope of possible solutions. Those who have always lived with barriers and misinformation perceive them as normal, unchanging parts of life, rather than problems to be solved. Many lack an informed understanding of how the current urban and professional sectors function; their experience with poorly executed past projects has left them distrustful and cynical; and most lack awareness of emerging technologies. Therefore, throughout the visioning process, we introduced new technologies to help them understand that some familiar technologies no longer served them well. Next, by working in a participatory framework, we co-created better alternatives.

Many cultures define ‘success’ as obtaining physical goods that others who are higher in the economic pyramid have acquired, i.e. they want a flush toilet, not a composting latrine. This can be one of the biggest barriers to introducing culturally appropriate technologies. Consequently, when we introduce new technologies, we take great care to listen to community feedback and carefully demonstrate some of the advantages to changing the customary way of life. One effective tool to help achieve this end is a video presentation demonstrating the proposed technology. Community members actually see how it works, as well as listen to testimonials from other users so they can envision their own use of it. In addition, bringing new users to meet with the existing users and actually trying the technology is ideal. It then becomes far easier to encourage them to embrace a new product or lifestyle. Once other women watched Agripina – the owner of one of the pilot stoves – cook on her new La Mazateca stove, they understood its value for better health, ease of cooking, and reduced use of firewood.

During the entire piloting process we learned that we must listen, observe and learn, and not insist that our ideas be accepted. Given a history of forced change from outsiders, solutions may not be accepted even if it is known that potential opportunities for change could greatly enhance the community’s standard of living. It is crucial to let the community see and accept the
solutions for themselves if true acceptance is to be realized. Otherwise, apparent tenuous support may well be actual resistance if the people are not supportive of the project, but are being agreeable in order to diffuse tensions and placate the outsiders.

We faced this kind of challenge with the introduction of composting latrines, which we promoted in tandem with the La Mazateca stoves. We in the ‘developed nations’ think of composting latrines as having the following attributes:

1. The structure is a clean and safe environment;
2. Disease vectors are reduced or eliminated;
3. Humanure compost is produced for agricultural use.

However, many of the populations we worked with did not understand or appreciate the need for a clean and safe building, nor the reason for the reduction of disease vectors.

Despite these obstacles, we hope the communities will eventually understand the value of the composting latrine when they see the effect of the humanure compost on their improved agriculture. Unfortunately, it takes 12 to 18 months to produce high-quality safe humanure compost, such an introduction requires constant encouragement to entice family members to use the system and to be patient as they await the visible outcome in their crop yields.

LISTEN AND COLLABORATE

Robert Chambers’ (1983) long ago advised that when exploring technological solutions, it is critical that organizations listen and collaborate with community members to develop solutions that are culturally appropriate and meet their expectations. Yet his call for inclusion remains unheeded by many development planners, who have received funding budgets to implement projects that have already been designed and identified as ‘appropriate’ by outsiders. Listening in such cases becomes little more than a polite gesture to accommodate the local community’s interest in being heard. In addition, many marginalized cultural groups interpret outside organizations as experts. They do not want to offend the ‘experts’ by contradicting or rejecting their ideas and plans because they are afraid that if they do so, the organization will then not provide them with any benefits at all.

The process of listening and truly understanding the desires, needs, and fears of the community and its individuals requires persistent presence in the community to build required trust. It is critical that all conversations be held at convenient times and in places where participants can speak openly about their ideas and expectations. When holding these conversations, organizations must be acutely aware of the cultural dynamics that play a critical role in what information is disclosed and what is withheld. For example, because many societies and cultures have a history of male domination, few females will ever speak openly and candidly in public when males are present. In such cases, it is important to hold conversations with males and females separately so women will bring their thoughts and ideas forward. In other cases, ethnic, religious or class differences may contribute to tensions that leave one group hesitant to speak openly in the presence of another. Finally, a distinct dynamic may occur when the whole community is together in one place listening and discussing the project. One must constantly adapt to a trust-building process, and have a toolbox full of creative solutions, as well as the ability to modify the technology to meet all cultural needs. What is appropriate for one community may be inappropriate for another. The only way to know if this is true is to listen, observe, and continue to listen.

In addition, flexibility in project planning and implementation is critical to success. If the community wants to go in a different direction, one must be willing to let go of one’s own ideas. Organizations must be willing to expend extra effort to uncover the truth and get the community to accurately express themselves. It may be necessary to help community members understand that some of their expectations may be out of the scope of current possibilities due to larger legal and political factors, or community capacity constraints. Decisions are reached by discussion and by remaining flexible while at the same time advising the community of what is possible. As trust builds, communities will be more likely to participate in smaller projects that will strengthen their willingness and ability to implement larger and more complex projects in the future.

There are many challenges to working in remote locations. However, the success of any technological implementation hinges on many other factors besides accessibility. These factors include establishing a local and effective supply chain, training community members to diagnose and repair simple technological problems, and making it possible for them to obtain any required replacement parts. Successful pilots and micro-projects must also be backed up with skilled technicians who know how to repair the technology, and more importantly, receive economic support for their work. In rural areas, residents are likely to have multiple economic activities. In addition to an occupation, they may farm land, care for family members, or engage in service or healing activities, etc. Thus, if a technician is harvesting coffee
and a community member needs their services to repair a stove, there must be sufficient financial incentive for the technician to do so. This economic incentive must be built into a primary business model for the technology program to be successful.

Finally, when introducing new concepts and technologies, one needs to be prepared for distrust and outright rejection. Distrust can be addressed by working with the community over a long period of time; learning the local language; knowing the history of the group and its cultural values, traditions and power relationships; accepting responsibility for mistakes when appropriate; and not misleading or lying to the community. When a team is unable to devote the time and attention to establishing the cultural expertise that is necessary for establishing trust, working with trusted local organizations is invaluable. WWF did so when collaborating with THP in order to introduce an appropriate technology that could benefit the community as well as further the global interest in preserving tropical forests.

Sometimes no amount of cultural sensitivity can convince a community to adopt a new technology. When that happens, coercing or compelling a community to accept the technology is bound to meet with what James Scott terms, “The Weapons of the Weak.” The community will refuse to use the technologies; they will mislead and deceive project planners; and they will sabotage projects. Colonial reign revealed that sometimes the poor and powerless do not want outsiders telling them how to live. In our case, because the Mazatec welcomed us into their communities to listen to their concerns, we could bring them some new technologies. And they helped us arrive at a better understanding of what appropriate technology truly means.

We have found that prior to implementing our projects, everyone needs to understand the working styles and expectations of the various team members. Working in remote communities is extremely stressful for those from the outside. Social and environmental living conditions can be challenging and intensified by cultural and linguistic differences. There must be an agreed upon process by which team members can openly discuss stressful issues that each team member faces. For those who are unfamiliar with the local culture, it is important that they understand in advance some of the basic cultural norms that they will encounter and how they are expected to react. As boring and mundane as it may sound, it is critical that a document be created and agreed upon by all parties. Our written agreement was not so much a legal document but a way to structure a safe conversation when things were not going smoothly. It also allowed both parties to reflect on what was agreed upon, eliminating the potential for disagreements.

Assessments and evaluations are extremely important to guide current and future actions, ultimately assuring that our projects are effective. The development team must be willing and able to change priorities, schedules and technologies to meet the cultural needs and expectations of community members, as well as adapt to other unforeseen events. The team must always listen to community members for constructive feedback. Rather than misunderstanding community resistance or misinterpreting differing views, team members must recognize such obstacles as an opportunity to improve the project, not abandon it, or worse, force it on a community that does not want it and will not use it.

Moreover, technology providers are typically enamored with technology. In many isolated communities, however, the most appropriate technology may be a low-tech solution. The community must decide what is best. The provider must be very frank about the merits, drawbacks and practicality of various solutions. Our experience with urine-diverting composting latrines and bio-sand water filters is an example of this. Both of these simple technologies produce excellent results with no moving parts. There are many technologically intensive solutions to human sanitation and water filtration and purification but, in remote locations, it is extremely difficult to keep complex systems operational. Thus, simplicity equals effectiveness.

In designing and implementing culturally appropriate social enterprises, one must transition from being a technology provider to being a business advisor. Organizations must be able to step back from directly managing projects and become mentors and advisors to the social enterprise while concurrently working with the members to refine and develop new technologies. The social enterprise (business) members need to have the flexibility to define the distribution and implementation of the technology program. The enterprise should strive for independence from the advisors, while the advisors need to ensure its overall success.

In order to alleviate poverty, there must be mechanisms in place for the social enterprises to have local control over the profits. Adequate financial services must be available to support business development, and the enterprises must know how to use them. This includes access to secure deposits, affordable financing, and, in many cases, the creation of micro-finance opportunities for workers and customers.

C O N C L U S I O N

A key factor in NGO partnerships is to ensure that all parties have common values and a willingness to effectively communicate openly and honestly. Organizations must know when they are outside their areas of
expertise and must be willing to be humble. Had WFH gone into the Mazateca with the preconceived design for a stove, we would have failed. Moreover, had THP not been open to working with us and educating us about the cultural nuances that may have escaped our attention, they would have failed. However, because the development teams at both THP and WFH were acutely aware of our respective limitations and expertise, we were able to forge a synergistic partnership that produced far more than either of us could have achieved on our own.

Our experience demonstrates that NGOs can successfully complete pilot and micro-projects in the international arena, if they strategically partner with local complementary NGOs. As a technology partner and innovator, we are acutely aware that our success is based solely on the success of our local social worker partner. Many technological innovators perceive solutions to problems as strictly technological. However, when working with marginalized and isolated communities, most of the challenges that development planners encounter stem from social, cultural and political factors. While technology solutions can be engineered to solve almost any challenge, the solution is only as good as the cultural acceptance of the technology. If development projects are to succeed, those who plan and put them into action must make efforts to understand the local history and culture. Because it takes years to do so, however, partnering with local organizations that have already established relationships, built trust, and learned to negotiate complex cultural networks can facilitate more successful outcomes.

Our goal to build capacity within marginalized communities is intended to better position them to continue their journey out of poverty after we step back. To do this, the community has to be involved with every step of the process to gain the experience and training to lead themselves into the future.

Water for Humans is looking forward to continuing its work with The Hunger Project-Mexico to bring technological solutions to other marginalized communities in Mexico. We are already planning to develop and co-create a social enterprise for the La Mazateca clean cook-stove builders. Our success and completion of this micro-project in the Mazateca prepared several remote marginalized communities to increase their capacity to collaborate and bring themselves one-step closer to ending the cycle of poverty. Currently, WFH is developing similar opportunities for the underserved throughout Latin America in collaboration with THP and other local experts in social work.

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4 Women and International Development (WID).
As a philosophy graduate of the University of Groningen, Jurnan Goos started working as an intern at the Spanda Foundation in October 2013. During the internship the focus of his was, for the most part, dedicated to the writing of Lil'a theoretical framework.

Jurnan has a passion for European Union politics; is an early member of the Alliance of Liberals and Democrats for Europe; favours an open-commons inspired approach to society and is further active as a youth ambassador for advocacy organisation ONE in the fight against extreme poverty.

INTRODUCTION

The number and influence of International Civil Society Organisations (ICSOs) has grown rapidly over the years and the depth, extent and advancement of human knowledge in the many fields of science can now be purposefully applied to address the many difficulties and hurdles currently faced in the development aid sector. In point of fact, there are plenty of valid reasons to expect that pooling and sharing knowledge in order to co-create innovative approaches and policies for the development community could intensely empower the whole area of action.

Recognising the potential of the already existing repository of knowledge in ICSOs and in the global development community, the Spanda Foundation sought to create the means to explore, share and learn from this treasury, while stimulating to make better and a wider use of the knowledge and skills therein guarded. Lila is the result. A means to a worthy end in itself: a continuous virtual world, structured as an experiential mode of learning and capacity building through cooperation and playing to the benefit of policy design, development and implementation. Lila innovates by connecting a wide range of stakeholders and lets its spillover effects serve co-creation: each round of Lila knows a winning team with a chance to implement their successful proposal as a reward.

Success of Lila ultimately depends on its ability to deliver these winning teams and that these live up to expectations by bringing about sustainable change in developing communities. Nevertheless, what Lila strives for depends, for now, as much on what it can do, as on its ability to attract players from civil society organisations and other individuals keen to pool and share their knowledge for the common good. To this aim, Lila’s identity is a multi-layered construct in the form of a virtual city, the Polis; an underlying theoretical mode based on a combination of new technologies, innovating by virtue of bringing together the best aspects of different technological concepts; the structure that allows for the co-creation of policies; and through experiential, capacity building play-character.

COMMUNITIES:
NETWORK OF ACTORS

Development aid has been around for a long time before ‘sustainability’ became a trending topic. Sustainability is a concept often encountered in terms of energy production or waste, yet much less frequently – and much less well understood – in terms of change within communities. To remain continuously aware of what sustainability means both in project design as well as evaluation, the Actor Network Theory (ANT) was a guiding model during the developing stages of Lila.

More akin to an approach than a methodology in scientific connotations, the ANT radically differs from mainstream sociology. In ANT, an actor – or actant – is defined as anything capable of modifying outcomes through a mediating effect in a series of actions. From this perspective, objects hold a causal role in human society as actors that influence, shape and redirect human behaviour. This is the most crucial realisation ANT has to offer in that it implies the abolishment of an essential difference between macro versus micro, as well as that of nature and society and the way in which concepts traditionally assigned to either of these qualitative insignia interact with each other.

From this perspective, success or failure in achieving sustainable change within communities depends on the relationship between actants in a network that grope around and involve numerous sectors of other networks not generally regarded as part of the issue.
All of these networks need to be renewed, extended and maintained lest they decay and disappear. Changing status quo on behalf of development, environmental, human and social rights or economic goals requires knowing whom is involved, where and why, but the vital step consists in aligning the goals of sustainable development with the autonomy of the local population, both individual and communal. Successfully helping to reshape such network relations demands for a willingness to participate by the local communities. Success and failure of changing an actor network is reduced to a dependency on the difference in community members’ ability to freely choose to become either actant in the network or not. If there is free will to join the network and actants feel properly represented by focal actors, the likelihood of involvement in, outreach to and investment in the future of society are much greater, and individual responsibility is acknowledged.

This reformulates the traditional sustainable development concept by connecting the perspective of project designers – Lila’s players – and project beneficiaries – the affected developing community –; sustainability is, henceforth, defined as inducing change that is perceived as beneficial by local communities and, as a result, sustained by local communities. Lila has become a roadmap to this ideal.

**Integration: Educational Games & E-Learning**

The early project phases made clear that educational games and e-learning needed to be situated elements, encompassed in a narrative that would render the smaller parts meaningful. This is to say that, in terms of design for a platform expected to run crowdsource-based in-game topics, a certain amount of experiential gameplay and interaction is what needs to keep players entertained.

In fact, ‘entertained’ encompasses only a part of what a game must aim for: player immersion. Player immersion is a psychological target-state in digitised games, as a successful game must grab and hold the player’s attention over a longer period of time, but must also motivate him or her to frequently return. This rather obvious principle coupled with the well proven motivational deficit by e-learning users, construe that e-learning is always ruled out other than where it is complementary to the overall game goals and structure. Moreover, the lack of psychological peer bonds within the e-learning environment is likely to result in a lower success rate of group-formation and collaboration, especially when used next to – rather than being integrated in – an ongoing virtual world.

Also educational games have their own drawbacks as they are designed to stimulate an attention span sufficient to accomplish a number of predefined tasks that can immediately be assessed. The palpable problem here is that such a predefined itinerary would not be possible in Lila. An important addition to this is that, more often than not, games fail as structures that need to stimulate a systematic recall of knowledge and make the user exercise his or her higher order cognitive abilities.

Despite these immediate deficiencies, a number of interesting game preferences are: a professed preference for instant gratification and rewards; a need for information provided as a utility that is instantly retrievable or usable; a preference for audiovisual material over text; and a random, informal and non-linear approach to information, all preferences that have been decisive factors in some of the project’s most crucial decisions.

**The Polis: A Citizen’s Peek**

Unstoppable waves of technological innovations seem to have only gained more momentum over recent years. New ideas have been applied to traditional learning methods, and play is taking centre stage through ever larger and more ambitious educational games. Lila purposely refers to this through its Sanskrit meaning, loosely translated into English as ‘play or game’, as well as a playground of higher interacting energies. In the city, the Polis, public and private lives have been given their own dimensions. Each player starts by entering some required personal information before creating an avatar that – after having been customized to personal liking – must join one of eight different Character groups, each resembling a roughly drawn border of professional interest and experience, examples are ‘Culture, Sport & Education’, ‘Government Affairs’, ‘Health’, ‘Donors’, ‘Media’, etc. groups. Once the avatar has been created, the player is requested to proceed by choosing a location to build a house, from where all his or her future gameplay will be resumed. Next to houses, the Polis has Public buildings to serve as meeting places and giving the city an important psychological familiarity; a parallel between the narrative of real public life and virtual public life to stimulate interaction. The first stop along the itinerary of knowledge that all players are requested to journey is the Library, dedicated to collect and create new knowledge. Prior to game take-off, Spanda and its Learning Partners will stock the Library with knowledge and valuable insights about whatever crowdsourced topic will take centre stage in the next nine-months lasting round of a policy development itinerary. Every three months, an additional topic is then introduced, both for cross-pollination of ideas as
well as to keep alive the interest of players whom do not have a keen interest in the current running topic. Players can make this a rich, highly accessible repository on development aid by adding to its content by individual or group efforts: co-creation and collective intelligence is empowered on many levels.

This feature of connecting individuals as well as groups is present throughout Lila. Even the Character groups reflect this, primarily through the Headquarters assigned to each of them. The Headquarters create the additional advantage of bringing together people that share a common professional perspective, which directly stimulate interaction and sharing knowledge. To this aim, the Forum House, being the centre of the Polis, draws in news and updates from all around the city, such as popular debates raised in any of the Character group’s Headquarters or well-read articles from the Library, etc. The Forum House is a central information hub to make the buzz of public life readily accessible.

G O V E R N A N C E &
T H E P A T H T O P O L I C Y

Like any city, the Polis is rule governed. For the purpose of experiential gameplay – i.e. entertainment – it is governed in two ways: on the one hand, citizens
have the opportunity to invest in their city and thereby influence its internal governance; on the other hand, is designed to develop policy. The process to build up the capacities to develop a policy is therefore more restricted and more demanding, time-consuming and intellectually challenging than it is entertaining.

The players can make investments, based on their individual accumulation of the Polis’ Community Currency, in projects listed in the Municipality Building located in the centre of the city. Also here the decision procedures mirrors the ideal of pooling resources and community preferences, as all of the projects that can be chosen from – whether this be to upgrade the city sustainable public transport system or the renewable energy production – require common investments from a significant number of citizens to reach a threshold for implementation.

By offering these modes of gameplay and introducing ways to affect what the Polis is like, what is really aimed for is a pathway to create a psychological sense of community. A similar aim is found in the city’s second currency, the Private Currency. Gathered as an increasing daily reward based upon sequential number of daily logins, it allows the individual players to shape their virtual life by buying decorative items for their house, or additional entertainment.

The most important building of the whole Polis is the Living Lab located at its very centre. As a major requirement for educational games is a design that benefits a structural recall of knowledge and that motivates the player in using higher order cognitive abilities, and because proposing and developing policy is often a highly complex matter of many conflicting interests, Lila gradually increases the burden on its players’ by a thriving-designed play-itinerary. Before a player can use the Living Lab’s functionality, an avatar must have reached a minimum ranking. The ranking system is based on the players accomplishing objectives or tasks that become more difficult as the game proceeds; by Knowledge Point rewards, players can reach thresholds that promote their avatar to the next ranking-level. There is a gap between the first three ranking levels and those up from four. From the fourth ranking onwards the policy development is modelled on the project-practice oriented methodological Logical Framework Approach (LFA) broadly used in the development sector. In its first stage, a policy proposal can be made by forming a group of a minimum of three players that work on completing the first part of the LFA. In the succeeding three stages, the demands on group size are increased to five, seven and ten members respectively, the latter with a minimum group diversity of five.

The last stage consists of submitting the policy proposal – including LFA and budget – for evaluation to the community at large and, eventually, to a team of experts. The timespan to work on a proposal is a maximum of nine months, but additional monitoring and balances for community reflection and debate are introduced by time-lags. For instance, when a group of players wants to proceed from one level to the next in the Living Lab, a period of community reflection is activated that lasts for one, two and three weeks for respectively stages two, three and four in the Living Lab.

Through in-game evaluation of policies by players, a peer-to-peer community effort drives the results of co-creation towards realisation. The reflection intervals for the community give rise to a profound emergent property unusual for development aid: an ability for the community at large to learn from another’s experience and knowledge. This can make all the difference in the world: never before has the development sector had the means to gradually develop policy using invaluable input from all the networks that relate to a particular problem, before adopting and implementing it.

**Conclusion**

Theoretical reflections on research conducted prior to the start of this project have now set in motion a process towards the gradual development of a virtual city that has been inspired by gaming practice, but wants something other than entertainment. Lila is an innovation to pool, share and explore knowledge: by combining the best of virtual worlds, educational games, and e-learning a virtual city has been designed to offers a unique set of problems, challenges and opportunities, both on a personal level through learning & networking, as well as on the public stage by working for a better tomorrow. It offers a public space as well as an institutional opening, leisure and entertainment, knowledge and training. It has been designed to inducing systemic change in the real world by dedicated effort and open commons sharing of knowledge; it is a solution-driven methodological model that can be successfully implemented in the many domains of human endeavour, whether that be business, science, politics, culture or any case in need of sustainable policy development that pays heed to the autonomy of local populations and their interest.

After its digital take-off, Lila’s success will be judged on the provided solution and results. The results depend on the willingness of the ICSOs to invest time and energy in Lila, but if even half of its potential comes to be fulfilled, this will not be the last time Lila finds its way to your senses.
* Lila (लीला) is a major concept in Hindu cosmology depicting the creative joyful playing activity of the absolute, in which the world is itself a stage of the play.


REFERENCES

As a Post-2015 world draws closer, an unspoken awareness is speedily gaining prominence: not only have the Millennium Development Goals failed to translate into more equitable state of things for people across the world, but there is now some admission that even if they did we still wouldn’t have achieved a world our hearts feel is possible. In a sense, what is feasible is no longer desirable: we have seemingly come to the logical ends of our institutional quests for a better world, and the echoes of systemic disillusionment are deafening. However, silhouetted by perpetuated narratives of ‘cruel optimism’ and the political compulsion to never lose hope is an amorphous, invisible planetary revolution that somehow transcends the utopian politics of hope and reaches through current paradigms of knowing and being – connecting with the impossible. In this essay, I write about a different kind of politics that is animating these consciousness shifts – not one of hope, but one of a radical element: ‘surprise’; this politics of surprise – a sustained intimacy with not-knowing, with our shared disenchantments, with a radically different conception of the cosmos, and with a rejuvenated sense of humility and ‘positionality’ in a universe that is no longer passive and dead, but sensuously alive – is largely bursting research into quantum realities, and local experiments with ‘neighbouring’ and gift-sharing. More importantly, this transitional politics is the non-dualistic reclamation of our poetic affinities with darkness as the source for ‘new’ moments – a Promethean reification of ‘lostness’ and the appropriation of our poetic affinities with darkness as the source for ‘new’ moments – a Promethean reification of ‘lostness’ that is becoming a powerful movement for deep change.

**KEYWORDS** – MDGs, politics, indigenous wisdom, quantum, change. | [43-50]
networked based political initiatives, making the sharing and pooling of knowledge a new way to take up democratic responsibility in order to change the political landscape towards a more sustainable social, economic and environmental outlook. Alternativet’s goals definitely require a reset of both the contemporary political-thinking as well as the power relations it supports and upholds.

The primary challenges that the new political party has to face are the conflictual counter-reactions from other parties and how to meet these challenges in a constructive way. Letting go of an ego-centred political perspective and replacing it with the ‘interest of the commons’ demands cooperation between political opponents as much as it does with allies.

**KEYWORDS** – politics, Danish parties, Alternativet, networked based political initiatives, knowledge pool, commons. | [51-54].

**HELÈNE FINIDORI**

**AN ECOLOGY FOR TRANSFORMATIVE ACTION WAITING TO BE DISCOVERED**

As our current system based on a growth-extraction spiral is leading us into the wall, we are seeing a multitude of innovative local solutions to local problems with people taking things inventively into their hands to construct alternatives in all kinds of domains. At the same time, new models are appearing at various levels and scales that address the challenges we are facing in more systemic ways. A whole ecology for transformative action is waiting to be discovered and nurtured, with legions of change agents engaged in bringing about change or ready to do so...

This article explores systemic change from a praxis and agency perspective, and the context and conditions for its unfolding. It examines the logics that underlie action, the dynamics, relationships, and processes involved, the role of social organization, leadership development, intercultural and inter-subjective communication, as well as possible leverage points.

This strategic inquiry draws on a variety of disciplines to suggest ways to amplify and accelerate the existing forces for change, and to advance on multiple fronts at once so that diverse efforts can coalesce and impacts can multiply.

**KEYWORDS** – systemic change, social organizations, transformative actions, leadership development, intercultural and inter-subjective communication. | [5-14].

**JURNAN GODS**

**LILA: A VIRTUAL EDUGAME FOR THE DEVELOPMENT COMMUNITY**

This article discusses Spanda’s *Lila* virtual platform that combines collective intelligence, open source, e-learning, edugames and virtual worlds. The purpose of this innovative serious virtual platform is to initiate, draft, co-create and implement transdisciplinary glocal development policies around a selected topic addressing the needs in the developing regions by coupling, pooling and sharing knowledge from civil societies across the world with local expertise in a playful, experimental, open access, virtual world. To this aim, reflections on open source, edugames, e-learning and virtual worlds have merged in a theoretical framework offering a suitable virtual environment wherein freedom of itinerary, structural recall of knowledge and intrinsically motivating activities create the proper conditions for the winner group of players to collectively co-create a strategic cultural multi-stakeholder community-based development policy and implement it in the real world.

**KEYWORDS** – collective intelligence, open source, e-learning, edugames, virtual world, development policy. | [89-93].

**ELZA MAALOUF**

**FUNCTIONAL DEMOCRACY: A NEW PARADIGM ON GEOPOLITICS IN THE MIDDLE EAST**

The author maintains that Western political models have shown that the one-person one-vote system may not work as a governing scheme for the majority of the world’s population and proposes to replace it with a value-systems approach to governance aiming at making the tenets of democracy more functional. While the former model is a one size-fit – as the one the West imposed on the Middle East region and that proved to be inadequate in the face of the complexity of the area – the latter uses a holistic approach to cultural emergence to design the scaffolding for what is next for that unique culture.

The proposed framework approach, which has been more than five decades in the making, is grounded into the Motion elements of Sherif’s social judgment theory, Graves’ Emergent Cyclical Levels of Existence theory and Beck’s Spiral Dynamics Integral, and additional research and field applications by the author herself.

Unlike most current models that only see the tip of the iceberg and design from a flat map perspective, the innovative value-system approach looks into the deeper layers of a specific culture – its memetic contours, life conditions, mindsets and beliefs —, searching for the unique indigenous expression of intelligence that informs its overall design to ultimately sustain the surfacing manifestation of actions and behaviours of the kind of democracy mostly functional to that particular culture.

This model was field tested in the 1990s in South Africa to help the country transition from Apartheid; it was applied in Israel/Palestine by the author and her colleagues at the Center for Human Emergency-Middle East, and implemented by other global practitioners in Iceland, the Netherlands, Brazil and Chile.

**KEYWORDS** – evolutionary politics, governance, democracy, value-system approach, spiral dynamics, indigenous intelligence, culture. | [55-64].

**ANDREW GAVIN MARSHALL**

**VOICES OF ACCESS: THE PEOPLE’S FOUNDATION**

This paper examines the development of a new type of ‘foundation, not concerned with promoting slow reforms with the ultimate aim of maintaining the existing social structures, but rather, to promote radical new alternatives for social organization. By promoting research, educational, media, exchange and activist programmes, the ‘Voice of Access: The People’s Foundation’ will seek to connect
Small-scale non-profits engaged in international work often set out with lofty aims, only to discover their projects fail or are rejected by local communities. Innovative approaches to successful development projects include partnering with local NGOs specializing in capacity building, while heeding a number of lessons learned from past development work to ensure that micro-level projects succeed. First, efforts to implement appropriate technologies in indigenous communities often fail because project planners do not consider cultural, historical and material constraints. These constraints include unequal power relations within communities that hinder resource access and distribution; prior community experience with colonial or development projects that had adverse impacts; and geographical isolation and environmental extremes that limit project success. Second, economic leakages often result in the financial benefits from development projects leaving local communities. Third, although micro-projects have the potential to be among the most beneficial to communities, strategic partnering with NGOs may provide key resources as well as social and political capital necessary for success. In this paper, we discuss these and other innovations related to the success of rural development micro-projects. We then consider how to strategically partner with NGOs, despite potential conflicts of interest that may arise. In expanding on innovative NGO approaches to development, we address capacity trust-building techniques, innovative methodologies, and deployment styles and techniques. We conclude that micro-projects which include strategic NGO partnerships; social-impact assessments; promote low-technology inputs; and provide local control of technology and profits have the best chance of local acceptance and long-term sustainability.

**Keywords** — innovation, micro-projects, international development, NGOs, economic leakage, appropriate technology, rural development, sustainable development, social impact assessment, NGO partnerships. [81-88].
leader or psychic. It presents a sequence of steps leading to the breakthrough. Finally, it proposes that meditation research, some examples of which are cited, be seen in the context of psychophysical self-regulation, and that it offers one powerful avenue for producing these exceptional experiences.

**KEYWORDS** - nonlocal consciousness, quantum biology, biographies, meditation, psychophysical self-regulation.

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**A N D R E A S W I T T E L**


This is an article about digital production and the crisis of capitalism. It is about production in the digital commons and its implications for the building of alternatives to a commodified world. As digital production is at the very heart of cognitive capitalism, the digital commons is not just any other disruption of the process of commodification. This is the field of a fierce struggle over the future of the Internet and the future of capitalism itself. It is potentially the moment that moves back the frontiers of measurement, value and quantification towards qualities, values and an expansion of the gift economy. For this potential to unfold, it is vital that those who are giving, sharing, and contributing or the benefit of humanity are supported by global policies that enable them to do so. They have to be supported because their gifts are not based on reciprocity and the obligation to return the gift. This is an argument about the future of digital labour. The article concludes that this could be achieved through a global basic income scheme.

**KEYWORDS** - political economy; gift; digital commons; digital technologies; labour; commodification.  | [35-24].

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**Roma locuta est, causa finita est**

[Rome has spoken, the case is concluded].

AUGUSTINE (354-430), Sermons, bk. i.
DISCLOSING
THE STATE OF THE ART IN
INNOVATION & HUMAN DEVELOPMENT
COGITATIONS

FROM RELATIVITY TO THRIVIABILITY,
FROM MICRO-PROJECTS TO VIRTUAL EDUGAMES,
FROM OPEN COMMONS TO PROMETHEAN DARKNESS,
FROM POLITICAL PLATFORM TO EVOLUTIONARY POLITICS,
FROM PEOPLE’S FOUNDATION TO NONLOCAL CONSCIOUSNESS,
FROM TRANSFORMATIVE ACTIONS TO COUNTER-CODIFICATION,
AND TOWARDS THE IMPOSSIBLE

ARE SOME OF THE VISIONS
UNVEILED IN

INNOVATION &
HUMAN DEVELOPMENT

ADEBAYO C. AKOMOLAFE
MICHEL BAUWENS
ALESSANDRO COLOMBO
UFFE ELSKJØP
HELENE PINIDORI
JURNAAN GOOS
ELZA MAALOUF
ANDREW GAVIN MARSHALL
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