From: Keith Presnell
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To:
Subject: Our Sustainable Future.

I would like to submitt the following for consideration. I think it provides a setting for any strategy development.

Yours sincerely

M.K.Presnell

THE SOCIAL CONUNDRUM.

The debate about the impact that our species is having on environmental balance incorporates science, politics, guesswork and lies. Mankind's many technological advances are at risk of being lost for want of balance. Should we as a species intend to preserve opportunities for future generations, we will need to exhibit a functional appreciation of natural mechanics, especially the balance between sustainability and diversity.

It is conceivable that we could slow or even reverse the decline of the Earth's carrying capacity in a meaningful time frame, but already the damage bill is high, and reserves of time are fast running out. Judging by the extent of environmental damage that has emerged over the last century, there is a sound case for assuming that many localities are already well past their natural carrying capacity. The human predicament is, that while restoring the environmental balances that best suit our species might be technically achievable, humanity lacks a common will.

About the time of the industrial revolution humanity stepped off the the path of evolution. Lured by the promise of material wealth, it went on to consume natural resources unsustainably, and in the process, widen social schisms. Equity, common amongst tribal communities, has been diluted to a point where, according to Google, half of the world's net wealth (in dollar terms) now belongs to the top 1% of the population. The the top 10% of the population hold 85%, while the bottom 90% hold only 15% of the world's total wealth.

In a village environment, natural accountability serves to maintain social equity. The private sector is naturally accountable and therefore inclined to support that outcome. Urbanisation effectively negates natural accountability, requiring the formalisation of various legal instruments to replace that deficiency.

Under the cover of urbanisation, the private sector has been able to shed responsibility for social welfare, enabling it to hijack those instruments be they laws, rules, regulations, protocols, peer review requirements, copyrights; including patents; enforcement provisions etc., (all intended as a replacement for natural accountability), and use them to further its own interests. In the face of that takeover, introducing the social changes needed to respond effectively to environmental destabilisation will not be easy.

Profiteering from arms supply keeps several major economies afloat. Whether it is a communist army, a democratic army or a terrorist army, all have shown themselves to be capable of pursuing genocide while vandalising both natural and social environments. That despite the vast majority of people in the communities they claim to 'protect', being of peaceful inclination and decrying the death and destruction being dismissed so lightly by the perpetrators. We might assume that a percentage of the profits from arms sales is being channeled into creating social discord.

Humanity's environmental vandalism, exacerbated by exponential population growth, is outstripping the Earth's ability to maintain supply. A 'supply and demand' graph of natural resource stocks over time, suggests that within the next decade, life on earth may well be irretrievably committed to another chaotic event that will have nothing to do with an asteroid smashing into the planet. While we have the technical capability to

escape its maw, we currently lack the spiritual maturity required to effectively apply that knowledge. Weakened by a massive reduction in species and cultural diversity, life, as we know, it is about to be tested as never before.

The human race has come to a crossroad. The challenge now is to decide if, like the biblical Samson, we intend to pull down the pillars of the temple that is life, and self-destruct, or if we are prepared to use our abilities to rebalance the natural environment, buying more time for the planet's inhabitants to pursue their potential destiny.

THE IMPORTANCE OF BALANCE

Science and technology underpin social commerce. Art is the organic counterbalance to science and technology. Art is responsible for sculpting our species' presence in the broader ecosystem. It encompasses aesthetics, religion, culture, relationships and spirituality. Functional civilisation requires a balance of both elements, art reflecting the organic side of life, and commerce to deal with life's operational logistics. Another way of looking at it is that commerce is an investment in maintaining a presence, art is the reward.

Homo sapiens has populated the planet with seven billion plus unique individuals. That number is growing exponentially. With its traditional workforce being sidelined by artificial intelligence, how many people is enough? In the next decade humanity will need to adjust its population to recognise natural limits to growth, and that task is being hampered by education curricula that remain focused on the myth of 'sustained economic growth,' when they should be focused on delivering an understanding of those limits.

Consensus becomes increasingly difficult as the size of any group increases. Centralised control distances decision making processes from grass root realities, and that provides a breeding ground for misinformation. Homogenising the population stifles innovation, encourages monopolies, and reduces the inter-dependancy that underpins social cohesion.

Finding a solution to flawed and inconsistent leadership has become a priority. Sound governance requires inspired facilitation directed at balancing materialism with quality-of-life outcomes, reducing class distinctions, and generally downsizing the environmental footprint of our species. That would involve embracing all technologies that might help to rebuild human scale communities where power, finance and education are equally accessible to everyone.

With general cooperation, we might progress these priorities, but cooperative effort requires both a common appreciation of the situation, and trust that the decisions being made are sensible.

To be sustainable, all life needs fair access to the natural commons. The commons are an inorganic matrix of land, water, air, etc. that support life, and any claim to exclusive ownership cannot be socially or ecologically justified. By failing to respecting the integrity of the commons, humanity is upsetting the various environmental balances that underpin life on this planet.

Whether it be on the scale of an individual organism, a species, an ecosystem, or the planet itself, the existence of each entity is a product of balance. Balance buys time needed for order to emerge from chaos. Order then fathers synergies, either as natural evolution, or as conscious behaviour.

Wikipedia describes balance in biomechanics as *an ability to maintain the line of gravity (vertical line from centre of mass) of a body within the base of support with minimal postural sway*. Religion generally seeks a balance between good and evil. Natural balance is a relationship between inert and living matter. For a community there is balance between the public sector, with social equity as its holy grail, and the private sector, with its mantra of specialised services delivered via a market economy.

Natural balance contains a degree of postural sway that enables the environment to absorb change without undue disturbance. Understanding how robust that capacity is requires an appreciation of the dynamics involved at a micro-ecological scale. Our species is yet to graduate in that discipline.

Appreciating the nuances of balance would require/inspire traumatic change to the way humanity views progress. For humanity to persist, it must acknowledge that an objective based on sustaining a growth economy is suicidal. The term for that degree of understanding is 'enlightenment'.

BALANCE LOST

EVOLUTION, EMULATION, EXPERIENCE and EDUCATION

First comes energy; or does it?; Then comes matter. Matter can be inert or it can be living. All living organisms have access to genetic information, including a survival instinct. An individual's education begins at birth. In the first instance it is progressed by emulation and experience, both of which assist the individual to learn what is not harmful, and what may be a useful resource. Anything beyond their ken is seen as being potentially harmful. Education signposts the path to enlightenment. It exponentially shrinks the unknown for the individual.

People are fearful of the unknown. Without education people would still be burning witches at the stake. The rewards that stem from a balanced education feature civilised group behaviour, a high degree of trust between individuals, a willingness to share, and the promise of sustainable co-existence. Without an education that delivers a common appreciation of civilised behaviour, social chaos will prevail. Currently, only about 40% of the global population has access to a tertiary education. Thus the main issues facing educators is lack of access and relevance for the individual.

For education to be effective, integrity of content, spiritual robustness, and technological merit must be balanced. Educating the individual involves formal and informal teaching designed to enhance their potential, but perhaps more importantly, it leaves that person comfortable with the idea that to work for the common good is simply to pay for one's keep. When that logic fails to resonate, individuals may well view access to communal assets as their birthright, and selfishness will prevail to the detriment of social accord.

A child's formal education starts with enhancement of their communication skills. That facilitates their next phase of development, which is to reinforce boundaries, establish social ethics, and introduce the value of self discipline. Using a grab bag of tools such as reading, writing, mathematics and computer skills, the focus of a child's primary education should leave them wanting to contribute to their immediate community.

Puberty in individuals is accompanied by an emerging ambition to self determine. It is during puberty that children really begin to consider their future. Armed with the ability to seek out knowledge, secondary education is a forum conducive to teenagers exploring their individual career options. By the time they exit this stage they should understand how to express themselves, whether that be linguistic, artistic, emotional and/or physical expression. They should be hungry for knowledge, and aware of the various techniques for accessing it.

Used appropriately, modern communication systems are sufficiently flexible to allow tertiary students to fine-tune their own education to meet personal aspirations. At the tertiary level. inter-institutional courses provide the best possible resource, and that needs to become the norm. It could be said that tertiary education is the maturation phase of an individual's development.

We might seek to educate everyone about the need to restore natural balance, but that raises an interesting conundrum. While many of the so called 'primitive' cultures understood value of natural balance, most have given way to the pursuit of material wealth.

As a snake sheds its old skin to emerge renewed, so must the human race shed its avaricious behaviour to assume an enlightened condition that accepts and appreciates its connection with the whole of life. In the process, it will find that the traditional approach to education is well past its use-by date.

GOVERNANCE

Governance evolved as a means of managing public access to the natural commons. It could be said that most governments are capitalistic. Whether it be a democratic government, a communistic government, or something in between, currently all major nations are ineffective at regulating equitable access to the natural commons.

Good governance can be likened to rowing a skiff where oarsmen on the port side represent the private sector and oarsmen on the starboard side the public sector. Evenly balanced and working cooperatively they move the boat through the water at maximum speed. In practice, the crew may ship a cox. That person adds weight to the skiff, slowing progress, but because the cox sits where they can see forward, and because they can apply the tiller to compensate for any imbalance in rower effort, their extra weight can be justified. A wise choice of cox will see the skiff maintain its course with minimal need to use the rudder. Applying rudder slows the boat down. The cox's role can be equated to that of governance.

Hypothetically governance should engage private sector activities to enhance social welfare. A balanced public and private sector should produce a collaborative environment with competition providing motivation. Upset that balance and either productivity will wane, or competitive malignancies, that range from social inequality to warfare, will emerge.

Undue focus on capitalism has destroyed any balance between the public and the private sectors. The private sector has evolved to spawn vast multinational corporations that have penetrated the political system in order to lay claim to ownership of the natural commons. Communications v/s arms manufacturing v/s pharmaceuticals v/s mining v/s criminal organisations v/s technological giants etc, etc., each competing for the biggest slice of the cake. Each seeking to profit from their acquisitions without due compensation for the environmental and social damage attributable to their operations.

Unfettered globalisation of a market economy has led to rampant exploitation by a corporate sector that, freed from effective public sector moderation, is upsetting natural balances and eroding the capacity of our planet to support life. The skiff is going around in ever decreasing circles.

THE ECONOMY

There is a dark side to economic growth. History has seen human communities evolve from hunter gatherers to agriculturalists, then to industrialists, and more recently to technologists. Each of those steps introduced new pressures on environmental balance. Each of these steps enabled our species to exercise greater leverage over other species. In economic terms, as hunter gatherers we invested in a futures contract anticipating that the planet's natural resources would remain inexhaustible. Mother Nature is now calling the contract back in, and with the planet's natural resources now in disarray, humanity is struggling to remain solvent.

In the beginning, with the operation of communities essentially local, natural accountability saw the private and public sectors operate with a degree of balance. Change came as the marketplace achieved national and international dimensions. That created pressure for control to become centralised. Centralising control reduces sensitivity to peripheral stimuli (ie individual opinion) allowing governments to divert responsibility for social wellbeing to other programs, including those being promoted by corporate agendas.

The industrial revolution generated the need for a convenient labour source, and that need saw the formation of large urban communities. At that time, social wellbeing was not a consideration. Suburbia evolved to introduce logistical challenges requiring large investments in infrastructure. Social complexities were met with an ever increasing plethora of laws, rules, regulations and taxes.

Who or what benefits from economic growth? Certainly not the web of life as it exists on our planet. Economists need to factor in that Earth is effectively a living organism, and that interfering with its metabolism has dangerous consequences for all resident life.

Our lust for economic growth defies common sense. It has to stop, *and the two options are a controlled stop or a chaotic stop.* A controlled stop would involve economic strategies that feature an inter-generational perspective. Our greed; exploited by the private sector to such good effect; needs to be balanced by an equally powerful social ethic.

REBIRTH

So how might humanity act to restore a sustainable balance? Simple adjustments to its current agenda are futile. A new approach to life is needed; one featuring a philosophy that values the mechanics of environmental balance; one that advocates for *Homo sapiens* to adjust its presence accordingly, one that features common sense. It would need to sponsor the concept of 'the natural commons' backed up by governance which sustainably regulates society's requirements for access thereto in accordance with natural limits. It would need to promote religion as a personal relationship with nature, encouraging a lifestyle built on the principle of *governance by the people for the planet*.

The ability to access unearned remuneration by claiming exclusive ownership of natural resources has to stop. Nature is inalienable. Other than on paper, non-renewable natural resources such as land, water and clean air cannot be owned. That adjustment alone would counter the bulk of the corruption that currently hampers the operation of most major economies.

A sustainable society would involve four major changes. (1) The first would be to reintroduce human scale communities where power, finance and education (aka equity) would be equally accessible to every member of the community. (2) At the same time, flawed leadership must give way to a facilitative process that seeks to balance materialism with quality-of-life outcomes, weaken class distinctions, and generally downsize the environmental footprint of the species. (3) Commerce must be rebalanced to become a mutually beneficial exercise, rather than a 'get rich quick' competition. (4) Finally, human frailty must be neutralised, and the only way that might happen is with the appropriate use of artificial intelligence.

SOCIAL PRIORITIES

When an individual's voice is discounted, when they are deprived of access to a functional education, or when they are left without a challenge, then the outcome for their community is going to be sub-optimal. They become grist for any terrorist organisation. The holy grail for humanity is to coordinate the potential of every individual to be productive and creative, requiring effective communication, universal access to education, and a population presence that matches the demands of evolution.

A community in balance will feature knowledge sharing, teamwork and equity. Our nervous system is a model for achieving social equity. It starts with nerve endings transmitting data to a central organ able to initiate responses based on the data it receives. The model works well in the individual and there is no reason why it won't work well for a species.

Its adoption would see large cities dismantled to create hamlets (neurons) interconnected by infrastructure (axons and synapses) that enable efficient communication. Data generated by each hamlet might then be transmitted to a regional centre (cerebrum) where artificial intelligence would collate, analyse and interpret the information.

From diversity comes resilience. Take a community of fifty to a few thousand people occupying an area of land of sufficient size to support them indefinitely. Each community enjoying local autonomy while seeking to achieve self-sufficiency. Every member thereof able to contribute their knowledge to a communal data management facility or node. Fifty to a few thousand communal nodes connected to a regional data management facility. Fifty regional intelligence nodes connected to a central node, and so on, eventually to create a global data intelligence repository that is *directly responsive to 'grass root' stimuli.* Conversely, every village node would have direct access to a global perspective of health, telecommunication services, education, product interface standards, along with the full range of innovative possibilities.

Technology is changing the way we do things. Instead of mega-industries, new micro-industrial technologies that meet the needs of a small community should become the norm. Distributed energy systems, small scale recycling systems, textile manufacturing, basic pharmaceutical capabilities that access local medicinal resources, etc., technologies that help the community to become self sufficient. In total, they could provide opportunities for all individuals to contribute to social advancement based on their specific circumstances. Industrial monopolies would become less relevant, reducing the costs associated with resourcing and then distributing centralised production. The diversity engendered by the model would enhance humanity's prospects for adapting to environmental change.

Urbanisation of the workforce is turning out to be an expensive anachronism. Congested transport systems that consume time, unhealthy environments, social aggressiveness, lack of accountability, all complicating life. There are many negatives associated with that lifestyle. One could well ask why we persist when artificial intelligence, coupled to advanced communication technologies, offers options that feature collaboration in lieu of competition. Options that are capable of balancing quality of life outcomes with the need to accumulate material wealth.

The market place's penchant for trading valuable natural resources for chimerical wealth must stop. Its negative impact on productivity of the natural commons could be equated to the impact of burning fossil fuels on the atmosphere. Both are unsustainable.

That degree of change will not happen overnight, but it is what our species needs to be aiming for should it wish to progress much further.

REVISITING EDUCATION

Open source' communication is a model that, could be used to modernise education. Current examples of open-source communication include the 'Wikipedia' and 'Linux' networks. When it comes to equitable access to education, that model could be applied to catalyse the aggregation of knowledge and ideas globally. It would require a framework for the various disciplines to contribute information relevant to their field. Each discipline could be made responsible for a competent screening or quality control process, such as those used by the creators of Linux. The resulting knowledge-bank would provide an opportunity for anyone with access to the internet to research their field of interest, contrasting with the current static model, which tends to link quality of education with the ability to pay. Coincidentally, that approach would reinforce the benefits of sharing.

The role of the institution in tertiary education would be to catalyse bonding between like-minded individuals with a balance between "face to face" and "virtual" contact. They would continue to play a valuable role providing access to the aids and specialised equipment required for course work. They also would remain as a forum for promoting community expectations.

A sound education would balance ethics with academic capability. It would acknowledge the spectrum of individual personalities, ranging from creative artisan to multi-disciplinarian to specialist, and it would approach formal training of an individual based on their potential to contribute to their community in any of those categories.

SUSTAINABLE ECONOMICS

In 1950 an ounce of gold sold for around $40. At that time, the basic wage in Australia was about $2,000/annum, equivalent to 50 ounces of gold. Now the price of gold is touching $2000 an ounce. The basic wage is around $46,000/annum, equivalent to 23 ounces of gold. Using gold as a natural datum, the purchasing power of the average years toil over that period has depreciated by around 50 percent.

The economic priority for humanity is to reverse that trend. It needs to rebalance the relationship between the private and the public sectors by matching the private sector's commercial currency with a public sector currency that is based on an equivalent natural datum; a currency that cannot be devalued; one that restores the protection lost when governments abandoned the safeguard provided by the requirement for equivalent bullion reserves to match the token money in circulation. Such a currency would present resource-hungry companies with an account to pay, based on the sustainable value of their operations, rather than any value society may attribute to a surrogate currency.

A public sector equivalent of the almighty dollar might be a measurable contribution to the advancement of community priorities. Time and skill spent on community endorsed activities, adjusted to reflect the value of that activity to the community could become a unit of credit (social credit?), issued in acknowledgement of that service. Advanced computer technologies would be needed to manage the accounts.

Individuals could use their time and skills to earn either money or social credits. For instance, a doctor of medicine could earn conventional money treating private patients, or community credits by volunteering their services to treat public patients.

The next step would be to legislate so that the right to lease a parcel of land can only be acquired using social credits. Lease instruments managed by the hamlet could specify what the land can be used for by including covenants that ensure that the land's environmental integrity is respected. Needing social credits to lease a parcel of land would eliminate speculative acquisition and unearned increments gained by rezoning land. Social credits would effectively be an I.O.U. issued by the local community acting as the banker.

Social housing has existed for centuries. Socially agreed access to the commons could be regulated in the same fashion. Improvements to servicing infrastructure or buildings are substantive investments, and would be subject to the normal profit & loss market environment. To afford their own practise, a doctor would need a combination of community credits to lease the land, and conventional money to 'value add', that is to pay for any improvements on the land.

COMMON SENSE GOVERNANCE

A materialistic society discounts the intangibles that gave many "primitive" societies a wonderful sense of purpose and belonging. For them, effective leadership derived from respect, and its efficaciousness was

assisted by a common understanding of village priorities. Generally, village governance was not democratic. Decisions were made by a suitably initiated/qualified elite.

With any group of individuals, the ability to focus on a common goal dissipates as the numbers involved grow. Conversely, the difficulty of satisfying everyone's personal agenda increases. As communities grow in size, effective governance demands 'facilitation' rather than the "follow me chaps" style of leadership. The private sector may still benefit from good leadership, but governance has become a multi disciplinary exercise encompassing all that is humanity.

A sustainable society would nationalise all its natural resources, decentralise control, and invest heavily in communication infrastructure. It would aim for social equity; that being when the value of a dollar is much the same for all community members; and it would ensure that everyone has unfettered access to a functional education.

Expanding on that, local autonomy engenders innovation. Regional coordination is needed to enhance local productivity. A national perspective should maintain its focus on balancing the import and export of natural resources, with the priority for the global theatre is to divert the resources currently being wasted on warfare into sustaining a healthy planet.

In lieu of the private sector's penchant for marketing and installing political candidates under the guise of democratic process, appointment of local community representatives would be better served by a formula that identifies a common sense mix of earned social credits and expertise.

Local councils could then select a member from within their ranks to represent their community in a regional context. No elections, no lobbying, no industry needed to provide the stage scenery now used to support party lines. Freed-up resources would all be available for tangible priorities. Cash inducements from vested interests would be eliminated. Regional councils could do likewise, and so on unto the global stage.

SHAPING A SUSTAINABLE SOCIETY

Social balance is a pre-requisite for maintaining the evolution of our species. The challenge for contemporary society is to balance the population size with quality of life and the accumulation of material wealth.

Getting the ball rolling will require a major rebalance of humanity's cultural, spiritual and motivational foundations. With the private sector actively resisting change, a revolution is needed. Not one based on the violent destructive exercises that inevitably reinforce private sector interests, but a quiet revolution. One that wakens the whole of humanity. One that seeks to balance commerce with spiritual comprehension. One that resurrects the use of 'common sense' as a filter for actions taken. One that puts cooperation before competition.

We know that environmental instability is threatening our species ability to maintain a presence on this planet. Sorting out the social, environmental and technical complexities involved in reversing the situation is well beyond our unaided capabilities. The only way back may well be to enter into a full partnership with artificial intelligence.

The industrial revolution saw tools, such as a shovel replaced by machinery able to achieve more in a day than an individual might in their lifetime. Now we are facing a technological revolution where devices, such as a computer, can potentially be replaced by artificial intelligence that theoretically could appreciate how the planet functions.

Artificial intelligence is much more capable of assimilating and manipulating knowledge than is humanity. *It has the potential to make decisions based on the sum knowledge of the human race, to audit outcomes free of minority influences, and to retain a focus on 'sustaining life' as distinct from rampant materialism.*

While the value of artificial intelligence may yet hinge on the integrity of its architects, there would seem to be the potential to incorporate programs able to detect fraudulent activity. If a computer can out-think a human at chess, artificial intelligence has a learning potential that would enable it to detect any aberrant data, whether introduced into its genetics historically, inadvertently or maliciously. Humanity needs that partnership to have any hope of restoring the environmental balances that support the web of life that it depends on.

Hypothetically, with artificial intelligence privy to the sum knowledge asset of our species, it could be asked how best to sustain natural evolution on the planet. If we are game, we might follow that question up by asking what our species needs to do to maintain a presence.

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