The Relevance of E. F. Schumacher in the 21st Century

Reframed by Milt Hetrick using the Universe Story (comments in red text)

by John Fullerton

(written in appreciation of E. F. Schumacher)

PREFACE TO REVIEW COMMENTS

As an admirer of John Fullerton, this reviewer wants to first say that the original essay by Mr. Fullerton is very much appreciated and timely. We need more discussions like this if we hope to change human behavior and prevent a pending collapse of our human social order as we know it today.

Some may say that a complete collapse may be what is required for homo sapiens to learn to live sustainably. I would hope that with the consciousness of people like Mr. Fullerton we could bring about a change that is less dramatic, that is non-violent – but to do so we do need to think differently – to use a modified worldview – to not use the same thinking that is driving us into the ditch. Perhaps most importantly, we need to learn from history – deep history. And the deepest history today is referred to as the Universe Story. Within that story we find lessons to be learned from events that occurred as long ago as 13.7 billion years.

For this reason, the "reframing" of Mr. Fullerton's essay is an effort to view his insights and ideas with a slightly different conceptual frame. Mr. Fullerton writes about the wisdom of E.F. Schumaker concerning 'permanence' and introduces a number of valuable insights he himself has acquired while working professionally in the financial sector.

The perspective or 'worldview' we are using in this current reframing effort is best summarized as the Universe Story. This story is simply a compilation of basic observations of our world, of its nature, of its "laws," including human nature as we know it today. We might add that the human species has made incredible leaps in awareness and consciousness just within our own lifetimes - much of this newly acquired information has yet to be distilled into practical wisdom.

"Whenever I run into a problem I can't solve, I always make it bigger."
Dwight D. Eisenhower

Mr. Fullerton's essay was primarily focused on the problems associated with the economic system as it exists today in America. Rather than focus on only the economic system in an effort to optimize it alone, we suggest that it may be appropriate to expand the "problem" as Eisenhower suggested. Most likely the American economic system is functioning exactly as it is designed to function – humans are behaving as expected within the existing system. Although we in America have a certain amount of free will and individual freedom preserved and protected in our social order, the political-economic-legal system nevertheless constructs boundaries for our 'free' behavior and hence we all tend to make choices that are within the system as designed. People who act outside the system boundaries typically end up in jail. (Some step over the line in search of fairness and justice; they too are often imprisoned unjustly - but that's another story).

By expanding our perspective to include the largest system we can currently envision, we must acknowledge that this natural world that we are a part of, live within, and whose "laws" we are obliged to observe if we wish to exist, is Good (some would say God-ly, of God). In any case, we have learned that it is wise to choose human behaviors that are consistent with the "laws" we observe in the Universe.

We (those living beings with free will) are all taught that an economic system is intended to "influence" our choices. If an economic system (or any system) influences us to ignore the law of gravity and jump off a bridge, it is obvious that we would say the system is broken. Rational folks among us would see that the system gets changed so that the amended system promotes life rather than ends it.

There are more and more people, in one way or another, suggesting – even shouting & screaming, that today's economic system that is currently influencing our choices is broken. Some people indicate it goes well beyond the economic system and that our political system is also broken. Some go further and suggest that our moral / ethical system is also broken. Some suggest that our system is broken in a much deeper context - spiritually. That's a lot of breakage. Fortunately, we just need to remind ourselves that what is broken is a human created system. So therefore we humans can fix it. It will probably take a village to fix – no single human being is capable of finding a comprehensive solution. Generally one would think that one's elected government should take on the responsibility of fixing a broken political-economic system – perhaps even one that these elected officials helped create. But there is a question about whether today's dysfunctional divisive two party political system can even be expected to help us find comprehensive adjustments to our current system – adjustments that will influence our behavior to live sustainably.

Let's start with some assumptions. If the reader does not or cannot agree with these items, there is no point in reading on.

1) The Universe, the natural world, has evolved in a manner that is by definition Good.
    a. The natural world we see around us is generally perceived as something of beauty – of wonder – something that continues to take our breath away on unexpected occasions.
        i. As the Earth turned toward the Sun again this morning – as it has done consistently for 365 x 13.7 billion plus 2012 years - the morning colors of the dark eastern clouds slowly changed to red to orange to gold and brilliant white – every morning we experience a new show – free.
        ii. As we hiked in the Red Rock Canyon National Preserve yesterday morning, at the edge of the Mohave Desert, 14 days from Winter Solstice, we identified 5 different species of flowering plants each decked out with their different arrangements of brilliant yellow blossoms – a welcome site among the Creosote, Sage, Mistletoe, various types of cactus, and dormant desert grass along the trail.
    b. The natural world we see around us is generally much older than we humans.
        i. We take joy in knowing that these amazing forms of desert life, millions of years old, have found their niche, have adapted to the harshest of environments – the Mohave.
        ii. These living beings obviously have learned to thrive in a sustainable, more or less permanent manner within their desert niche.
    c. Homo Sapiens (modern human) also emerged from the natural world – but just recently (around 100,000 years ago).
        i. The Universe is still observing our adaptability.
        ii. There is no question we humans are endowed with incredible capabilities, with complexity
2) Rather than invent more wheels, it seems appropriate as Mr. Fullerton did with Mr. Schumacher's ideas, to make full use of insights, knowledge and wisdom of others, then apply one's own life experiences in an attempt to build on what already exists.
3) As stated earlier, human free will and individual freedom are theoretically valued, protected and promoted in the American social order.
    a. Social Contracts such as our Constitution (with Amendments) describe such protections AND to a lesser degree limit our freedom by defining our responsibilities in a democratic republic.
    b. The prevailing economic system in America, one version of Capitalism, in turn is intended to further confine our random exercise of individual freedom, provide some rational order, and **influence** our choices – influence the choices of the so called 'free market.'
4) The problem is the system not the people. Our system trains, educates, endoctrinates individuals to behave, to make choices that are unsustainable.
5) The number one priority to is to learn to live sustainably

6) Having done that, the number two priority is to live life and savor every moment – we will natural continue to be curious and naturally ask why? And naturally seek to explore the unknown? And naturally create even more complex systems. If we do learn to live sustainably, we can thrive on Planet Earth for hundreds of millions of years.

Although we often are tempted to look back in time when life was simpler, less complex, it is also appropriate to look around and see that the Universe Story is also a history of Emergence – creating something more (complex) from nothing but (basic elements, parts, simpler things, simpler ideas,…) as a result of forming new relationships (new ways of putting the pieces together, new ways of juxtaposing old ideas, …). .

Emergence can be defined as the creation of something more from nothing but as a result of new relationships[1]

Although we may feel uncomfortable as our lives become more and more complex as humans continue to extend their capabilities with new "tools" (also called technology) that allow them to see further into space, to see deeper into matter, to remember more, to become aware of more, to increase collective learning and evolving consciousness, etc. this is the direction the universe has been going for the past 13.7 billion years – before that we just don't know.

Simply stated, as the Universe expands and cools and calms, natural forces embedded within all matter form more and more subtle combinations/ relationships that in turn result in new creations.

This is observed to hold true at least up to point where the new creation / system becomes too complex and appears to become unstable with a finite life. (e.g. basic elements more complex than atomic number 82 are observed to be unstable / radioactive and spontaneously 'decay' to another more stable configuration – 'half life' is used to characterize their lack of permanent stability; human cultures and civilization, themselves complex creations of humans certainly have been observed to have a finite life; entities such as corporations created from nothing but individual people as a result of new relationships outlined in employment agreements, corporate charters, a stockholder prospectus, etc. are intended to be immortal but generally die over time or at least morph into something different with a new business goal or product in an effort to adapt to a new market or economic environment.)

Our species, homo sapiens, is an example of the natural evolution (being able to adapt to changing environments) combined with the Universe's tendency to become more integrated / complex. We are positioned on the outer reaches of a mammalian branch of the phylogenic Tree of Life in terms of complexity. Less we become too arrogant, evolution is the history of extinction as well as success – there are far more species that are no longer with us than exist today. Species that were not able to adapt to the ever changing environment fell by the wayside – not because they weren't the strongest or the most powerful but because they did not or could not adapt to changes that occurred in their living environment. Adaptability often through collective cooperation has been a self-selecting characteristic for survival of a species. The dinosaurs (a species that had lived sustainable for 100 million years) vanished not because they weren't the strongest, biggest species around, but because they could not adapt to the rapid changes in the environment brought about by the impact of a large meteor in the Yucatan. However other species were able to hunker down during this same period of time and adapted to this rapid change in their common environment – included among the list of surviving species was the small furry mammal that is our ancient ancestor – from which primates evolved – from which humans evolved.

But here we are. As of about 50,000 to 100,000 years ago we see the emergence of homo sapiens from eastern Africa – a species that was able to adapt to severe climate fluctuations – including ice ages (primarily by thriving in the equatorial regions of the planet) or more temperate coastal regions. Few in numbers, but who traveled and lived in groups, in bands, in tribes, - that had learned there is safety in numbers, who had learned that a group hunting

[1] Emergence is term used by Ursula Goodenough. See Appendix A for details

expedition is generally better than a single hunter (tactics, redundancy, collective power, collective intellect, etc.). Some learned that there were human behaviors that were not sustainable – such as overhunting a species so as to drive it into extinction (as we think humans did on Easter Island when they decimated the eco-system with their unsustainable behavior and forced inhabitant to either leave the island or die or and as we think early North American inhabitants did to the wooly mammoth, and other mega fauna, or….).

The experiment continues and the question remains unanswered. Is the species called homo sapiens too complex, gifted with too much free will to be able to survive on the long term? Or will they inevitably let their reptilian instincts (such as greed and selfishness) drive them into extinction? The experiment with homo sapiens is being conducted with an opportunity to ease into this evolution of self-awareness and consciousness as the environment has been changing slowly since the last ice age. However recently, within the last 50 years, the population began to "explode" – increasing almost exponentially. As a result of this population explosion (a critical behavior that absolutely must be changed) our global environment is also changing rapidly (e.g. climate change). The entire planet's eco-system is being affected by the 7 billion humans living today as we dump 27 billion tons of CO_2 into our common atmpsophere each year. There is no question that that human behavior is changing the global environment of all living species – on a much larger scale than Easter Island or the North American continent. Granted 4% of the people (Americans) are responsible for probably 25-30% of the changes due to unsustainable living practices that are occurring.

So we are in desperate need to a new way of thinking – a new morality some refer to as eco-morality – a new ethics for sustainable living. John Fullerton's essay provides some ideas for a new way of thinking. We have added some editorial comments to compliment his ideas – comments meant to reframe his discussion based on insights derived from the Universe Story. **Milt Hetrick, Centennial, Colorado,** 2012

The Relevance of E. F. Schumacher in the 21st Century (Reframed)

The inevitability of globalization and the dominance of increasingly large and powerful global corporations and financial institutions are an accepted fact of contemporary economic life. Competitive forces pushing us further in this direction continue to build. The (economic) benefits of (a larger) scale are real (within the context of an invalid economic model), furthered by accelerating technological advances. A former CEO of JPMorgan once proclaimed, "Size is not a strategy (within a sustainable social order[2])." He was wrong (to think the American economic system is a sustainable social order). In 2001, an American banking dynasty came to a close with the take-over by Chase Manhattan Bank.

The fact that this take-over of JP Morgan even occurred is evidence that there is something wrong with our political-economic system. There is something broken in our worldview and our ethics/morality.

> When a human creation (such as a financial institution) continues to "grow" in size, in wealth, in power, etc. and simultaneously becomes too-big-to fail, too-big-to-manage, too-big-to-be-responsible (to All Life on the Planet), too-big-to-be-transparent then there is something wrong with the system that promotes such growth.
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> > **Assumption:** Hoarding (personal accumulation) of any nature (wealth, power, earth's resources, things, etc …) is a mental illness[3].

[2] In this essay, we will attempt to describe the basic elements of a sustainable social order.
[3] Wisdom handed down from the Iroquois Confederacy at the time Europeans began settling in North America.

> The personal (or organizational) accumulation of wealth, resources… is of no value to society. Such hoarding basically prevents others from gaining access to and using said resources. The Iroquois learned that if the person (or organization, i.e. group of people) involved in hoarding cannot be helped to change such behavior, there is no recourse but to banish them from the society (prevent them from interacting with and harming other life.)[4]

> When any person or organization of people (e.g. corporation, union, army, government, etc.) is allowed to accumulate wealth, power, etc. with impunity, then there is something wrong with our system.[5]

As industries mature, scale only becomes more critical out of competitive necessity. State capitalism from emerging powers China and Russia only raise the stakes further in our competitive global economy. Within this context, Fritz Schumacher's bestselling book, *Small is Beautiful*, and his ideas about human scale, decentralization, and appropriate technologies may seem quaint and out of touch. We may believe that "small is beautiful" in our hearts, **but our head is teaching us that "big wins."** Experience has taught us to ignore our logical heads at our peril. Nevertheless, our conscience is telling us, now more than ever, that something is amiss. **A new era is struggling to unfold**. While the Obama phenomena may in some ways reflect this change, it does not by any means define it. **We need to pause and reflect carefully in light of what we see happening to the health and prosperity of individuals, whole populations, other species, oceans, the soil, rainforests, the atmosphere, indeed the entire planetary system, if we are awake enough to notice.**

Something about our global economic system is broken. I say that not as an environmentalist or as a human rights activist, but as a former managing director and nearly twenty-year veteran of JPMorgan and subsequently a hedge fund CEO. With the global credit crisis that emerged during the summer of 2007, and the ensuing financial and economic turmoil that some say is exceeded only by the Great Depression, the stability and even viability of our freewheeling, complex and interconnected global financial system has come into question. **Even the "experts" are scrambling for answers as they reinvent the purpose and practices of major institutions, including even the Federal Reserve Bank itself.**

The linkage between a global interconnected financial system and the real economy seems to loosen during boom times. Finance has become more abstract and ever more complex with **previously unimaginable wealth accruing to the relative few who control increasingly massive concentrations of capital**. But when the music stops, the linkage with the real economy reasserts itself, spreading the pain far and wide to those who saw little of the benefits during the boom times. Nevertheless, the credit crisis, brought on and exacerbated by financial abstraction run amok, does not in itself constitute a broken economic system. Our free market system is accustomed to correcting its own excesses, often with painful adjustments as part of the process.

Today we face **two problems in our economic system**. The **first is a cyclical credit driven contraction**, which leaves the entire middle class vulnerable and the poor distressed and increasingly desperate. The **second** problem is more profound. So far, we are mostly focused on its symptoms, such as the increased awareness of climate change risk, water shortages, the collapse of whole fisheries, rising raw material prices led by oil, and now food scarcities as well. However, these are only symptoms of the **conflict between our growth driven economic system and the finite limits of the biosphere that are coming into clear focus.**

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[4] Thom Hartmann, http://www.thomhartmann.com/bigpicture/10-8-12-iroquois-confederacy

[5] This recognizes that it is prudent to "save" appropriate resources for "emergency" or contingencies. Squirrels wisely put up nuts for the winter, bears store up fat for the months of hibernation, people save money for their elder years when they are no longer physically or mentally able to work productively, etc. **However**, to personally accumulate more than say $3M in economic fat for retirement is economic obesity and one might argue serves no real purpose for the Planet or any living being on it. Suppose you live for 30 years beyond retirement – that's $100,000 income per year for 30 years (assuming no interest or dividends). That's 5 times what WalMart associates are paid – and the current economic system expects them to get along on their $20,000 / year compensation.

We are at risk of being distracted by the current cyclical stresses in the financial system, which overshadow the more critical *scale* challenges we face. Unfortunately, many of the remedies for the first problem will inevitably be in conflict with the difficult choices we face in addressing the second. When stimulating growth is the solution to cyclical downturns, yet **this growth of our resource intensive global economy presses against known physical limits of the biosphere, a contradiction arises we cannot ignore.**

Our global economic system is broken not because of the credit crisis; ***it is broken because it is predicated on perpetual, resource driven growth with no recognition of scale limitations that are in turn driven by the very real fact that Earth's resources are limited and are now being used (consumed[6]) by 7 billion people.***

In his book *Common Wealth, Economics for a Crowded Planet (2008)*, renowned economist Jeffrey Sachs bluntly describes the world's ability to combine long-term economic growth and environmental health. "**One thing is certain: *The current trajectory of human activity is not sustainable*."(1)** He observes that in the business as usual scenario, with human population projected to grow by 40 percent by 2050, and average per capita income growing fourfold over that timeframe, we can expect the current $67 trillion global economy to grow approximately sixfold to over $400 trillion by mid century. When there is growing evidence that we have already overshot the biosphere's carrying capacity, even **contemplating a six fold increase is absurd (actually insane because such behavior is self-destructive). Yet this is exactly the path we are on**. It is time to pause and reflect on the so-called "inevitability" of our growth-driven, increasingly "efficient" global economy. We must concentrate our minds on how to understand the implications, and where to turn for the wisdom to guide the evolution of our economic models and our public policy choices.

> **Good News!** During our lifetimes, the amazing species called homo sapiens has learned how to extend its awareness and ability to see outward and inward to better observe the Universe. These observations are now compiled in a rather detailed Universe Story that begins 13.7 billion years ago (Big Bang) and weaves a golden thread through deep history to the present moment. The Story's golden thread continues to 4.56 billion years ago when the earth was first formed. Around 3.8 billion years ago the first complex system capable of replicating itself, the first living cell emerges. . and began to cool and calm am connects us with all our ancestors, with everything we can see around us today. The Story gives us an awareness of what to expect tomorrow.
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> The Universe Story is written in the language of poetry, in the language of the world's great religions and oral traditions, and more recently has been translated into the language of science understood around the world. Some say this is the story of God, of Nature, of the Universe and more – in any case it is everybody's story – a story we all have in common – a story all living beings share. .
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> The Universe Story weaves a continuous golden thread from that original ball of energy/light to us and everything we see around us. In the beginning there was light/energy from which fundamental particles (bosons, quarks, then protons, neutrons, electrons) emerged. As this Universe of subatomic particles continued to expand and cool, new relationship were able to form and hydrogen (75% of the seeable Universe) and helium atoms (24% of the seeable Universe) emerged – atoms - something more complex from nothing but subatomic particles - expanding outward and cooling. Now the force of gravity inherent in all matter can now form new relationships and gather up clusters of this matter into hundreds of billions of galaxies and within each galaxy form new relationships that are smaller collections of hydrogen and helium that come together to become the hundreds of billions of stars – some of which are known as supernovas – the furnaces from which all other elements in the periodic table emerge when these giant stars die and

[6] 'Used' versus 'Consumed' perhaps needs further explanation. In a sustainable world, one we must move into immediately if we wish to have the human species continue to thrive, we no longer "mine" the Earth's resources. We no longer extract minerals and consider them "mine." Instead when we extract a particular material, we considered it as Borrowing with the expectation that every atom will be returned so it can be used by future generations. In this context, there is zero consumption. Today we consume because vast amounts of precious materials are dumped into land fills, the ocean, or incinerated and carried by the wind to places unknown.

explode. New generations of stars formed from the remnants of the old, including our star, our Sun – a Goldie Locks star that was just right. Our Sun captured a sufficient amount of the rare elements flying through the Milky Way galaxy to form a diverse family of orbiting planets including a Goldie Locks one we call Earth - .Then 4.56 billion years ago the Earth took form and emerged from nothing but gases and mineral solids within the accretion disk surrounding the Sun. As the randomized material in the accretion disk consolidated, as the bombardment diminished, as the environment calmed and the Earth cooled, a billion years went by but life began to emerge. The Tree of Life emerged / evolved over the next 3.5 billion years – millions of plant and animal species – ever increasing complexity – each threshold shows the emergence of more consciousness. – homo sapiens currently have the privilege and responsibility of serving as the eye of the planet, of the solar system.

When we observe our Planet, our solar system, our Universe we see a number of things. There is an amazing consistency within the Universe – we can see that the laws that apply to our personal experiences on Planet Earth, appear to apply to the whole of the observable Universe as well.

We see the Universe expanding, ever changing, moving in time and space, and finding ways to become more complex – the emergence of life on planet Earth is consistent with the direction of what we can see all around us – emergence = the creation of something new from nothing but as a result of new relationships.

Life evolved on planet earth only because of the daily persistent stream of energy – 365 days for 4.56 billion years the sun provided a measure of life giving energy virtually unchanged – only with slight variations due to the earths wobble

All life evolved on Planet Earth using energy from the sun –

Life is chemistry running backward driven by an energy source Sun

Humans acquire their energy from animals and plants,

How does the Universe Story help us construct a new morality, a new ethics?

TBD

How does observation of the Universe Story help Fix our broken economic system?

The economic system is the predominate method of making "rational" decisions today. It's a given. When you are faced with a choice , you use cost to make your decision – the lowest cost if you are the buyer – the highest possible cost if you are the seller – that's the way the 'for-profit' system is set up – and if the 'economic system' is the preferred way to make choices, then economics helps make that decision.

It is rare in a world where people struggling with having enough money to purchase living essentials (food, clothing, shelter,..) that economics is not used to make choices. In effect economics has taken over and has indeed become our belief system from which our ethics now are based – ethics being the guidelines/rules / basic principles that guide one's decisions.

When faced with a decision about purchasing choices, say a sustainably product, and an unsustainable product, one will still consider "How much does it cost?" In a world with an ideal economic model, where costs are not conveniently ignored by the seller, AND where real /true value to the planet, which is therefore the true value for my nation, which is then a true value for my state, which is then a true value for my family, which is then a true value for me, 'economics' might still be a good means to help make choices. The real / true value is discussed by Korten and can be described in various ways – we have chosen to suggest an ordering of the values starting with must have values to would like values.

"In the event of an emergency, put on your oxygen mask first, then assist the person next to you"

We can start with the most fundamental of all. Life is / requires a flow of energy. For a human to live, we each need energy (food/fuel), plus fresh water & varying amounts of 26 basic elements found in the soil, and of course oxygen to burn the fuel. With just these basics it is possible to 'exist' for months [even confined to 6' x 8' cell[7]]– but of course such basic living conditions that allow a person to exist do not allow a person to reach their human potential.

The Universe Story tells us that the forms of life that that thrived on planet Earth all derive energy from the Sun – either directly or indirectly. – directly as do autotrophs that look directly at the Sun and through the process we call photosynthesis convert electromagnetic energy (plus CO2, water, and certain minerals) into chemical energy that store the energy overnight and when the Sun is obscured by clouds, etc. and or indirectly as do heterotrophs (that take in the energy produced by the autotrophs or other heterotrophs)

Fix our broken political system?
TBD
Change our propensity to use violence?
TBD

Our quest for God? For Good? For Complexity?
TBD

Our curiousity?
TBD

Our forever evolving consciousness?
TBD

Why is Biomimicry a valid approach or a valid way to seek wisdom?
TBD

What is the Universe Story?
TBD

Is there a short version of the Story? (That doesn't take 13.7 billion years to tell?)
TBD

What are some of the important Lessons Learned from the Universe Story?

- Planet Earth is a Goldie Locks planet for Life
- The first emergence of Life occurred 3.8 billion years ago – some 760 million years after Earth was formed
- Life today evolved on planet earth from a common ancestor (3.5 billion years ago)

[7] Bradley Manning was arrested for releasing autocratically-classified Government documents that disclosed a number of embarrassing communiqués within U.S. government agencies. He was held in solitary confinement for 6 months, much of that time naked because his captors insisted he was a danger to himself despite opposite findings of two prison mental health doctors, subjected to mental stresses (consider forms of torture by certain experts in the field) in an effort to break his mental well being. Allegedly, this treatment was an effort to coerce a confession from Manning that implicated WikiLeak's co-founder. As of Nov 2012, Manning had been imprisoned for nearly 2 years without due process and was scheduled for a first court appearance in Dec.

    - All Life is related
    - We are all one interdependent family
    - All Life requires energy – the only sustainable source of energy for Life on Earth is the Sun
- Human ancestors emerged around 2-3 million years ago
- Homo sapiens, our species, emerged around 50,000 – 100,000 years ago
- Recorded civilizations appeared 10,000 years ago
- The Earth is expected to remain habitable for 500 million years
- Within 100-150 years, humans will have consumed all the ancient reserves of hydrocarbon– leaving none for future generations – leaving a planet with a climate and sea levels that are hardly habitable – leaving a planet that has suffered from the mass extinction of millions of the life forms we have today.
- Humans have evolved to know the "I" and to be the "eye" of the planet
- Humans have a highly evolved awareness /consciousness – capable of recalling the past, experiencing the now, and predicting events in the future.
- Whereas natural evolution was the primary source of emergence – the creation of something more from nothing but as a result of new relationships, humans are now an additional source of emergence creating things and systems as a result of new relationships of earth's resources and emerging human relations, families, bands/tribes, neighborhoods, organizations, corporations, governments, countries/nation states, multinational organizations.
- 7 billion people now populate the planet and our unsustainable behavior is having a detrimental impact on all Life
- A new morality / eco-ethics is required for the human race – Universal Human Rights and Responsibilities

Is the Story Complete?

Obviously we humans continue to observe the Universe, the stars, our star, our planet, and all life on it. We continue to observe our fellow homo sapiens, and even our self – all in an effort to better understand that within and the world around us. Each day these observations add knowledge and new answers to old questions – this observation also suggest new questions – so the Story continues to unfold – No the Story is not complete and never will be – but it gets richer and more profound every moment.

In the wake of the current financial crisis, it is clear in which direction the debate on how to "fix the system" is headed. After the taxpayer supported rescue of Bear Stearns, calls for government intervention in the mortgage and housing markets, and for alternatives to Milton Friedman's free market gospel abound. Even Alan Greenspan, once considered perhaps the most respected central banker of the modern era, is being scrutinized as we look for someone to blame. We can expect the pendulum shifting back toward increased government regulation as the inevitable response to the recent crisis.

What we are not hearing, at least in the mainstream media, is a critical reframing of the questions that address root causes. The current policy debate accompanying the presidential election is **void of any serious understanding of the inherently unsustainable economic model operating in the world.**

We are not hearing a debate about the sustainability of a **perpetually growing global economic system nested within our finite biosphere**. We are not hearing a debate about the **wisdom of allowing financial power (and systemic risk) to be increasingly concentrated in the hands of a few financial institutions of increasing complexity and scale**. We are not **publicly questioning the wisdom of the system we have allowed to evolve in response to capital's quest for ever increasing financial returns**. Nor are we debating where to **look for creative responses**. Instead we see proposals to tweak the model while we continue business as usual. The "powers that be," as is often the case, have too much invested in the system to ask these fundamental questions.

However, nothing could be more important at this critical time. What we must grasp is that the **financial crisis we are reacting to is but a cyclical side show to the bigger issues we face regarding the sustainability of our economic system**. We should see the present financial crisis as a wake-up call to this far greater challenge. We should search with an open mind for the wisdom we need to **transition our economic system onto a sustainable path, grounded in ecological reality, with a respect for human justice and a deep appreciation for all life.** As Sachs and many before have told us, the **current path is unsustainable**. What is needed is nothing less than a new economic myth, which incorporates the central issue of scale in order to supplant and **transcend the "invisible hand" of the free market. We need a "post-modern (post-materialist) economic theory."**

At the beginning of the 20th century, scale did not matter. At start of the 21st century, scale redefines our economic challenge.

In my personal quest for this new economic myth, I was stopped dead in my tracks after discovering E. F. Schumacher several years ago. Most who know of Schumacher know him from his seminal work, *Small is Beautiful—Economics as if People Mattered* (1973). The fortunate ones have also read his final published work, *A Guide for the Perplexed*, a title that grabbed me and did not disappoint. Most disciples of Schumacher probably encountered his clear thinking during the 70s. Many went on to become leaders in the environmental movement. I was in junior high school when *Small is Beautiful* was published, and then was busy building a career in global finance during the 80s and 90s on the belief that finance rather than politics would dominate international relations during my lifetime. I got that right, but not in the way I expected. **Seeing global finance, *what I do*, as a root cause in fueling our unsustainable economic system, has shaken many of my prior beliefs on economics**. It focuses the mind on the proper role of finance within a healthy economy.

I didn't discover Schumacher until my middle years, when I was (and still remain) in a search for answers to essential questions on how to reconcile the economic system I know well with the philosophical and spiritual truths I hold dear. How, for example, to reconcile the "golden rule" with the "invisible hand"? How can an economic system built on the celebration of individual greed and envy possibly lead to long-term societal prosperity?

> The "invisible hand" of the free market refers to the collective wisdom (or lack thereof) of the general public that forms the "market." This in effect is saying that that the "invisible hand" is only as wise as the market is informed of Reality. Generally speaking, today's market is informed by the producers' advertizing – but the market is not well informed of the truth – of reality – of the Real World, just the (human created) real world.
>
> **Example #1:** Hydrocarbons found within the earth are being extracted and burned at every increasing rates as more and more cultures around the planet are becoming "developed" and have tasted the sweetness of having mechanical slaves powered by hydrocarbons (or electricity made from hydrocarbons) help them perform tasks they previously had to perform manually. Very understandable. Coal, Oil and Gas corporations who profit from this extraction inform the market how great their product is (currently we are exposed to advertizing from extractors who purports to produce clean coal, and then there is the not so attractive lady in black who tells us about clean natural gas, etc.
>
> The market is not being informed that these hydrocarbons are:
>
> 1) Finite in quantity and will be consumed within 100-150 years at the current rate of consumption – if we haven't transitioned completely to renewable energy by then, the lives of our grandchildren and all future generations who no longer have this readily available energy resource will change abruptly - their lives will return to the manual labor of the 18th century.
> 2) The open combustion of hydrocarbons (including biomass) extracts oxygen from the atmosphere and dumps CO_2 back into the atmosphere where it acts as a greenhouse gas and alters the heat balance of the planet -

3) Much too precious to burn – these ancient reserves of hydrocarbon solids, liquids and gases are materials in an elevated energy state thanks to living organisms – autotrophs that patiently harvested sunlight for 70 million years and used that electromagnetic radiation to drive photosynthesis so that CO_2 and water could be converted into a hydrocarbon / sugar and oxygen (the opposite of burning – what appears to be a reduction in entropy, an increase in order that signifies Life – See Lovelace) – placed in the earth during the carboniferous era some 400 million years ago – a patient process that took perhaps70 million years of sunlight to be converted into these stores of chemical energy – reserves that we are consuming / burning . consuming forever without even one thought of replacing for future generations
4) carbon. .. .

Why do we teach our children selflessness while our economy's core architecture presumes self-interest? While these questions have been debated in academic and philosophical circles over the ages, **real world experience did not seem to hold us accountable** much of the time. Until now.

Now, we are beginning to understand that **a perpetually growing, resource dependent, waste generating economic system cannot operate indefinitely within the limits of a finite planet**. We were warned earlier, when it would have been easier to address these issues, by the Club of Rome study called "Limits to Growth."(2) We chose to ignore and even ridicule the report as being "neo-Malthusian." Our economic system is indeed on a collision course with the biosphere as many experts tell us. Thomas Friedman and his analysis of technology driving globalization is only part of the story. The world may be flat, but far more critical in terms of its implications, ***the world is full*, and *that* changes everything.**

Suddenly the prophecy in our wisdom traditions is becoming clear for reasons we previously did not appreciate. Our systematic pursuit of self-interest, all in the name of "freedom," turns out to be harming even the "successful" among us, much less the interests of those without the power to be heard, both alive and not yet born. This truth was always there; it's just that we could pretend to deny it in the belief that a rising tide would lift all boats. To find the next growth frontier to exploit, we could simply "go west." But now, we are out of more "wests." Shockingly, some of our leading scientists, including Stephen Hawking, are discussing moving the human experiment to other planets, out of necessity, for the long-term survival of the species.

In *Small is Beautiful*, Schumacher quotes Keynes who, during the economic hardship of the 1930s, advised us to use the idea of **personal enrichment** as the driving force to pull society out of the Great Depression. The time is not yet (says Keynes) for a "**return to some of the most sure and certain principles of religion and traditional virtue—that avarice is a vice, that the exaction of usury is a misdemeanor, and the love of money is detestable**."(3) Schumacher continues reminding us of Keynes' remarkable prescience, even at the depth of the Great Depression:

Economic progress, (Keynes) counseled, is obtainable only if we employ those powerful human drives of selfishness, which religion and traditional wisdom universally call upon us to resist. The modern economy is propelled by a frenzy of greed and indulges in an orgy of envy, and these are not the accidental features but the very causes of its expansionist success. The question is whether such causes can be effective for long or whether they carry within themselves the seeds of destruction. It appears that we are getting data from this experiment that support the idea that Capitalism and the unrestrained Free Market economics is at best amoral but in reality immoral – as it insists on more and more profit even at the expense of human suffering. This is immediately evident as the for-profit corporations are inserting themselves into the medical care / pharmaceutical sector.

Perhaps intuitively, based on philosophical conviction, and with no direct reference to ecological limits, Keynes appeared to understand that our expansionist economic model built on a foundation of self-interest was doomed in the long run. Keynes believed that society would shift its priorities (as he himself had done) to non-material pursuits once a certain level of material wellbeing was secured. Unfortunately, **history has shown that this belief in humanity's evolution may have been misplaced.** Schumacher concludes, "**If human vices such as greed and envy are systematically cultivated, the inevitable result is nothing less than a collapse of intelligence**." (4)

What may have made sense as a strategy to recover from the Great Depression has been generalized into the basis for our materialist, expansionist economic system. That system draws down life sustaining yet finite natural capital at an accelerating rate and calls it development and growth. **Personal fortunes derived from this broken system are celebrated in our culture**. Yet we are seeing that such a system inevitably does indeed sow the seeds of its own destruction, as has become only too apparent at the beginning of the 21st century. Such a system, which cultivates ever-increasing needs among a rising global population, must mathematically face the limits of the finite natural resources and waste sinks of our planet as a product of its very "success."

New and appropriate technologies and massive shifts to improve resource efficiency and reduce waste (as well as conservation efforts, and austerity programs) no doubt will help and buy time. But we cannot underestimate the profound inconsistency of a resource intensive material economy built on perpetual growth, operating within the physical limits of a finite planet. Such an inherently unsustainable system is not built upon wisdom. It is built upon a foundation of sand that intentionally rejects the very principles of traditional virtue, as Keynes explicitly pointed out.

Unlike during Keynes' time, when the human population was small and relatively poor (therefore placing few resource demands on the environment) and the earth's resources appeared limitless, **it is now time that we transcend to an economics built upon wisdom.** Schumacher's instruction is clear and compelling. "From an economic view point, the central concept of wisdom is permanence[8]. We must study the economics of permanence."(5) This intention takes us in a profoundly different direction than conventional, Cartesian thinking. "Permanence" suggests ***valuing durability over efficiency, stability over speed.*** These are different values from those typically celebrated in the marketplace.

The marketplace embraces risk and understands failure. But certain risks and failures are simply not acceptable and must be managed differently. It is "inefficient" to buy home insurance, but we do it when the risk of loss is too great, and permanence is threatened. We need to think about what adjustments are necessary to "insure" the permanence of our collective home, which must include a stable civil society. Such thinking must address the very nature of our economic system. Without a sustainable and just economic system, there is no permanence. We need to inject these ideas into the public debate by reframing the cyclical economic concerns that preoccupy the mainstream media. **We see little true recognition of this profound challenge** among our business, financial and governmental leadership, which remains absorbed with short-term tactical issues.

We do observe excitement around new "green" initiatives, usually technology based solutions to the problems we perceive. Technology breakthroughs are essential and inevitable, surprising even the optimists among us. Advances in technology and the great human entrepreneurial spirit are essential in tackling the sustainability challenges we face. However, while we run down this path, which we certainly must, we should also heed Einstein's admonition, **"We can't solve problems by using the same kind of thinking we used when we created the problems."**

Relying on technology solutions alone to solve our sustainability challenges, which are largely the product of technological advances, is not wise. We must think differently, seeing the complexity of the sustainability challenge in a holistic fashion, in the search for genuine lasting solutions. According to Schumacher, we need solutions consistent with an "economics of permanence," which he tells us is derived from *prudence*.(6) My research reveals that prudence is the first among the cardinal virtues and is best understood as "truth." Thomist scholar Josef Pieper, in *The Four Cardinal Virtues*, closes his chapter on prudence by saying, "The good is prudent beforehand; but that is prudent which is in keeping with reality."(7) Schumacher is telling us that economics is prudent only if it is truthful, that is to say, only if it is "in keeping with reality." Can't help but think about externalities at this point – the deliberate effort to ignore certain costs in the production of a product – this deliberate obscuration of the real/true cost is common practice in the current economic system.

[8] Disagree. The focus should be on sustainability – products that are produced using renewable energy and that can be 100% recycled when no longer of use is much more important than permanence – long life of the item.

Following Schumacher's lead, we should look to the great wisdom traditions for direction in this truth. Where better to look than to the ideas and teachings from all cultures that have stood the test of time, rather than restrict ourselves to contemporary economic theories that we know are limited and incomplete.

Schumacher is relevant to our critical 21st century challenges precisely for this reason. His philosophy, his concern about the limits of materialistic scientism, his distinctions between divergent and convergent problems, and his ideas of decentralism, appropriate technology, and human scale to name but a few, are all rooted in the great spiritual and philosophical teachings. Not surprisingly, his ideas, in addition to being humane and just, are aligned with nature and nature's sustainable way, the only truly sustainable system we know. They are, I believe, rooted in truth as best as Schumacher could discern it, and therefore they represent wisdom, the wisdom of permanence.

If you examine Schumacher's personal library, which is carefully stewarded at the E. F. Schumacher Society in the Berkshires, you will find that most of the texts are not about economics. Instead, they include the great philosophical and spiritual texts from all traditions. Schumacher's gift and genius was to derive economic principles and ideas from these teachings, to have the courage to speak the truth, despite knowing it often flew in the face of conventional economic thinking, and to make the truth accessible with his clear and witty prose. What emerges is certainly not the final word on the economics of permanence. Some of his thinking is outdated, or simply missed the mark. But as a foundation to build upon, it is invaluable. The reason his ideas about economics ring true is because they are built upon these wisdom traditions. The contradictions of modern economics are gone.

Our challenge now is to refine and update this thinking and to chart a practical path of convergence between the reality that exists in our economic system today and the principles we strive to uphold and upon which our long run prosperity undoubtedly depends. We will need to stimulate and utilize "appropriate" technological breakthroughs on this path, but at the same time remain grounded in truth. Clarifying the first principles of this truth, as best as our collective wisdom—both past and present—allows, is our most urgent task. **The opening decades of 21st century may be our best chance to launch the critical transformation of our economic system to an economics of permanence. We need to get it right, as only our collective consciousness will allow.**

At the end of *The Kingdom of God is Within You*, Leo Tolstoy underscores the importance of grounding our lives, and by extension, our society and institutions, including our economic system, which profoundly impacts all life on earth, on the bedrock foundation of truth.

"The sole meaning of life is to serve humanity by contributing to the establishment of the kingdom of God, which can only be done by the recognition and profession of the truth by every man."(8)

Transitioning to a sustainable and just economic system is the ultimate challenge of the 21st century. History no doubt will judge our generation by how well we acknowledge, embrace and take up this challenge. Before racing into action, into our Cartesian predisposition toward logical problem solving, **let us begin by recognizing and professing the truth.** E. F. Schumacher and the Schumacher Library is a beautiful place to start.

Endnotes

1. Jeffrey Sachs, *Common Wealth, Economics for a Crowded Planet*, (New York: Penguin, 2008) pp. 57.
2. Donella Meadows, Dennis Meadows, Jorgen Randers, William Behrens III,*The Limits to Growth* (New York: Universe Books, 1972).
3. E. F. Schumacher, *Small is Beautiful*, (New York: Harper Perennial, 1989) pp. 31.
4. Ibid, pp. 31-32.
5. Ibid, pp. 34.
6. Ibid, pp. 316-317.
7. Josef Pieper, *The Four Cardinal Virtues*, (Notre Dame: Notre Dame Press, 1966) pp. 9.
8. Leo Tolstoy, *The Kingdom of God Is Within You,* (New York: Bison Books, 1984) pp. 368.

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Surviving Progress, Directors: Mathieu Roy, Harold Crooks

http://www.imdb.com/title/tt1462014/?licb=0.7262365193799724

Earth in brackets, Anjali Appadurai, College of Americas,

Sing fortheclimatenow.com

Emergence

[Ref: Chapter 30: Ecomorality: Toward Ethics of Sustainability, by Ursula Goodenough; from *"A Pivotal Moment: Population, Justice & the Environmental Challenge," edited by Laurie Mazer.*]

*"**Emergence:** defined as the generation of **something-more-from-nothing-but** as a consequence of relationships.*

Emergent properties arise in both non-life and life. A classic example in nonlife is the surface tension of liquid water. Surface tension is not a property of a single water molecule. It arises ("pops through") as the consequence of water molecules in relationship with one another; water molecules(nothing-buts) generate surface tension (something-more) when they interact under particular conditions…

In life, the nothing-buts are cellular components—DNA, proteins, lipids, and so on—which are, in turn, nothing but atoms in relationship. Relationships between cellular components in turn generate the something-mores called biological traits, like motility, metabolism, photo-synthesis, vision, life cycles, and minds. Hence emergence is a layered concept: A something-more on one scale (the protein insulin, emergent from atoms) can serve as a nothing-but for a something-more at a different scale (the trait we call blood-glucose regulation)."