

# **Civilization**

## **The First Rational Proactive Plan and Roadmap for a Comprehensive World Civilization**

by

**Will Coxon MA**

**'We feel quite truly that our wisdom begins where that of the author ends, and we would like to have him give us answers, while all he can do is give us desires. And these desires he can arouse in us only by making us contemplate the supreme beauty that the last effort of his art has permitted him to reach.'**

### **Proust**

**This wonderful quote from Proust is as good as it gets, as far as it goes. What it doesn't do is prepare the reader for a work that contains, what will be for most readers, a lot of new concepts that are interconnected and densely packed. My suggestion is first, to read it through inline, including the Appendix, just to familiarize yourself with the material. Second, to read it through again and this time insert the relevant Appendix into the text where it is recommended. Third, reread those areas which you find difficult and keep reading them until comprehension arrives. And finally read the whole thing through to make sure you have missed nothing.**

**As a professional researcher before I retired this is the procedure that I used when tackling new concepts when densely packed. As long as the writing is clear, as I am assured that it is in Civilization, then all will be revealed.**

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# Civilization

## The First Rational Proactive Plan & Roadmap for a Comprehensive World Civilization.

### Introduction

Where our universe came from is still a matter of speculation. Our best guess at present is an infinite primordial state which is an energy field in flux - an energy field in a state of random chaos (see Ed Witten's M-Theory and the Neo-Confucian metaphysicians Shao Yong and Zhou Dun-i who proposed the very first Theory of Everything in 11th century China). The random chaos by its very nature giving rise to differentiations - moments of structured order - that in turn give birth to endless universes, one of which is our own.

Our universe is defined by the laws of physics. This is not speculation even though the full ramifications of these laws are not fully understood. Our knowledge increases not at a constant rate but at an accelerating rate. Looking back just a few hundred years we can see the amazing progress we have made from the 'dark ages' to scientific enlightenment to scientific application that gives us our technological world. This is an evolving process where knowledge gives rise to new technologies that succeed or fail in line with the Darwinian evolutionary principle of survival of the fittest. This is no longer genetic evolution, this is cultural evolution. And cultural evolution is a lot faster than genetic evolution by many orders of magnitude.

Evolution is a defining principle of our universe. It is the process by which the laws of physics give expression to our universe's dynamic nature.

Evolution is a quasi entity in much the same way as a 'Mexican Wave' is a quasi entity in a stadium filled human beings sitting and standing in synchronized movement. And just as the 'Mexican Wave' exists as an emergent property of synchronized human activity, so evolution exists as an emergent property of the laws of physics. It is 'The' fundamental process that drives everything on all scales in our universe.

Evolution on our planet has resulted in the double-spiral helix life form that over billions of years has produced the biosphere and the billions of species it is made up from. Until finally the evolutionary process has produced a species, homo sapiens, that can communicate rationally via symbolic language. We can safely accept this as a fact because of the evidence provided by science; itself a rational

evolutionary development and one which has many aspects (physics, chemistry, biology, etc.). What these aspects have revealed about the biosphere and humanity's place in it is that homo sapiens are an integral part of the biosphere and because of homo sapiens ability to communicate rationally - the only species to do so - we can be considered as the rational component of the biosphere. I am hardly the first to suggest this.

All homo sapiens can understand this because of the rational component of 'Our Common Humanity' (see Appendix 1) although not all human beings wish to do so.

As stated above we know that the evolutionary process gives rise to life forms out of the laws of physics. Atoms and molecules are the products of the laws of physics and combine into self-replicating chemicals that further evolve into life forms. We homo sapiens and the rest of the double spiral helix life forms of the biosphere are the living proof of the dynamic process we know as evolution. Evolution is the driving force behind everything in our universe and as a consequence it almost certainly means that we live in a universe teeming with life.

Building a civilization from the evolutionary perspective is the bases on which this Manuscript (MS) has been created. What follows is a Rational Proactive Plan and Roadmap for a Comprehensive World Civilization. A desirable objective for homo sapiens to achieve this century. It can also be described as the Proactive Custodial Role for Humankind in regard to the Biosphere.

Rational and Proactive in the form of a Bounded Rationality (see Appendix 3 : Bounded Rationality). The Plan and Roadmap are an extrapolation from the world we live in today where we have entered a new era that is both Multi-polar and Multi-cultural (see Factor 3).

This Plan and Roadmap would be of no use if it wasn't practical as well as Rational and Proactive. The practicality of constructing a Comprehensive World Civilization depends upon creating *real world* assets for such a civilization which in turn depends upon an economic system fit for purpose.

Economics is a manmade construct (see Appendix 2: Complexity and Economics). It is not a set of laws in nature in the same way as the laws of physics determine the universe in which we live. As such, homo sapiens are capable of *creating* an economic system that delivers a Comprehensive World Civilization that is both Rational and Proactive, in terms of a Bounded Rationality (see Appendix 3: Bounded Rationality), and obtainable in terms of *creating real world* assets (see Factor 6).

As the economic operating system is a Homo Sapiens construct it would be useful if we have a definition for this operating system for our Bounded Rationality:

A process by which *real world* assets can be brought into being by the use of a 'medium of exchange', money, and where money has no intrinsic value of its own.

While at the same time providing a living for the individual Homo Sapiens that are involved in the process of bringing *real world* assets into being.

Before I start a discourse on *real world* assets and the economic operating system that will bring them into being (Factor 6) it would be wise to introduce all of the Factors of this Bounded Rationality for a Comprehensive World Civilization. To facilitate this, see diagram 1. It consists of the Factors of the Bounded Rationality and their Governing Principles. The Bounded Rationality itself has a Governing Principle in that it is Proactive: It is positive in attitude, dynamic in its implementation and has a definite goal.

The Factors are as follows:

**Factor 1)** Homo Sapiens' relationship to his fellow Homo Sapiens where the Governing Principle is Our Common Humanity.

**Factor 2)** Homo Sapiens' relationship to the Biosphere where the Governing Principle is the evolutionary process.

**Factor 3)** A regionalized world which is Multi-polar and Multi-cultural where the Governing Principle is co-operation.

**Factor 4)** An ongoing evolutionary process of understanding the Nature of Reality through science, consciousness, representation and belief where the Governing Principle is research.

**Factor 5)** The Wisdom of Crowds where the Governing Principle is education with facts.

**Factor 6)** The practical creation of *real world* assets to achieve a Comprehensive World Civilization where the Governing Principle is an economic operating system fit for purpose.

**Factor 7)** The time factor where the Governing Principle is expediency of/or speed of transition.

The beauty of having a Bounded Rationality that is Proactive is that there is only need for those factors that are needed to bring it into being. A reactive Bounded Rationality would need all of the factors that are related to the subject and those could number in the thousands. (see Appendix 3: Bounded Rationality).

As most of the material in this MS will be new to most people, so the writer has made sure that all of the salient points, all of the concepts and definitions, are readily available on the internet or in a good dictionary.

We homo sapiens and the rest of the biosphere are in a period of great transition. As one evolutionary era falls away another takes its place. The present chaos we seem to be surrounded by is just the boundary condition between 2 eras; the transition period. Things are nothing like as bad as they seem. Yes, we are in the middle of a mass extinction event that needs to be reversed but this can easily be achieved by constructing a Comprehensive World Civilization on the parameters of

the new era we have already entered which are both Multi-polar and Multi-cultural (see Factor 3) and which includes the rest of the biosphere in its Comprehensive makeup.

The evolutionary process as stated above now goes on in humanity's cultural expression and with all of the polar regions except one based on the positive aspects of Our Common Humanity (see Appendix 1) the final outcome is hardly in doubt. Cooperation rather than conflict is the glue to stick our Multi-polar Multi-cultural world together. The rest is just hard work and creativity.

\*

As a strong believer in the civilized values of our European polar region I voted against brexit. As a strong believer in the Wisdom of Crowds (Factor 5) I could not ignore the referendum result of the 23rd June 2016, hence, Appendix 7 : Brexit, the Wisdom of Crowds and the European Union of Nation States. For all Europeans and not just the European members of the Green Party this is essential reading.

\*

The truth of what I have written in Civilization is obvious to me but because of the unique content which will be new to most readers I offer a quote from Arthur Schopenhauer in regard to truth:

All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.

\*

## The Factors

Let us deal with the first five factors and their relationship to each other before using them as the background to the portrait of the figure, the sixth factor. This painting metaphor (think of the 'Mona Lisa') delivers the overall image of the Bounded Rationality.

The background (Factors 1-5) sets the portrait in context and sets out a narrative of the where, the how and/or the why the portrait has come to be painted, which is often the case in portrait paintings. In this metaphor the figure being portrayed has the body, limbs and clothing as *real world* assets (Factor 6), and where the head is the Governing Principle wearing the face of the Capitalist operating system. Perhaps this is why the 'Mona Lisa's smile' is so enigmatic, she obviously knows a secret that the viewer doesn't.

Factor 7, the time factor, is the frame of the portrait in this painting metaphor and denotes the time frame for the Bounded Rationality.



## The Factors 1-5

### Factor 1 : Homo Sapiens' Relationship to his Fellow Homo Sapiens

Homo Sapiens' relationship to his fellow Homo Sapiens (1) has not been governed by the positive aspects of Our Common Humanity for the most of human history. 'Might is Right' would be closer to actuality. Indeed last century was dominated by 'Might is Right' with 2 world wars and numerous other ones to prove the point. This escalation of 'Might is Right' to a world level was brought to an abrupt end by the invention of nuclear weapons which only assured mutual destruction of the participants. Homo Sapiens have since backed away from warfare and Homo Sapiens' relationship to his fellow Homo Sapiens being governed by 'Might is Right'. The folly of this mode of thinking was only realized when we finally came to see where it led; self-destruction. It has been in retreat ever since. Basing Homo Sapiens relationship to his fellow Homo Sapiens on the positive aspects of Our Common Humanity (see Appendix 1 ; Our Common Humanity) is the only sensible way forward. Cooperation and tolerance being the only values that can deliver our Comprehensive World Civilization.

What has emerged over the intervening years since the Second World War is a world - albeit, not yet fully realized - which is a regionally based Multi-polar Multi-cultural world (see Factor 3). Where each pole has its own dominant culture. Homo Sapiens love their own culture as much as they love their own language; the two being joined more than just at the hip. Thankfully, all the poles, except the Middle-east and North-African pole, have come to base their cultures on the positive aspects of Our Common Humanity.

The Middle-east and North African pole has based their culture, in the main, on medieval fundamentalism. A large part of which is Salifist, a culture that has its goal of turning the entire world into a theocratic caliphate by the use of violence, i.e. 'Might is Right'. This is never going to happen as the people in the other poles will not let them.

The way forward to a Comprehensive World Civilization in regard to Homo Sapiens' relationship to his fellow Homo Sapiens can only have the positive aspects of Our Common Humanity as its Governing Principle. Where co-operation replaces conflict. And, mutual respect replaces hostility. This is just common sense (see Appendix 1 : Our Common Humanity).

The evolutionary process is taking place within side of our cultural environment as well as our biological environment. At one time all Homo Sapiens shared the same culture - that of the 'hunter gatherer'. Once Homo Sapiens became settled into agricultural communities - the beginning of civilization - it was then that the cultural diversification began. Different regions, usually built around river systems, then produced the entwined 'twin heads' of language and culture. Each unique to its own region.

This wonderful diversity we now have between cultures is something to cherish. Excepting of course the medieval fundamentalists of the Middle-east and North African pole who would like to destroy all of these wonderful cultures.

Indeed, if we were starting off to construct a Multi-polar Multi-cultural world we could even produce a rule that would characterize this brave new world of different cultures and how elements of other cultures could be included in the dominant culture. Let's call it: The Silvern Rule. And this would state: small minorities good, big minorities bad. Small minorities would allow for cross fertilization and contribute to the dominant culture but big minorities would become isolated and detached in the dominant culture and that would lead to friction and eventually to conflict.

However, we are not starting off to construct a Multi-polar Multi-cultural world. So we will have to learn to live with the big minorities that most poles have. This tolerance seems to have been working well, except for the medieval fundamentalist minorities that harbour Salifist activists that are producing terrorists that carry out atrocities throughout the world. For those that don't know what a Salifist is, he is a person who believes in converting everyone to Islam by whatever means necessary.

Europe is a post-Christian culture by which I mean religion has been divorced from social organizations. Religion in post-Christian culture is seen as an individual's belief choice (see Factor 4 : The Nature of Reality). Naturally, post-Christian culture gets on well with post-Islamic culture such as Turkey once was because the secular nature of both allows for dialogue without any religious overtones or interference.

It is only those in Islam that still have Salifist beliefs and hence have religion as a social organization that everyone has a problem with. If only Donald Trump had said that all medieval fundamental Salifist Muslims should be banned from entering the USA, we Europeans could all have gone along with that but he said we should ban all Muslims; therefore not making the differentiation between post-Islamist culture and medieval fundamental Salifist Islamist culture. Separating these out is difficult but far from impossible.

Therefore, Homo Sapiens relationship to his Fellow Homo Sapiens, for our Comprehensive World Civilization must be governed by the positive aspects of cooperation and tolerance of Our Common Humanity and not by the negative aspects of intolerance, hate and domination. Those cultures that promote these negative aspects, namely Salifist medieval fundamentalists, must be isolated and confined.

## **Factor 2 : Homo Sapiens' Relationship to the Biosphere (2)**

Homo Sapiens relationship to the Biosphere (2) where the Governing Principle is the Evolutionary Process, has just gone through an enormous transition just

recently when 195 countries signed up to a target of 1.5/2 degree increase in temperature for the planet. Homo Sapiens have finally woken up to the fact that it is us that are responsible for the rapid change in the world's climate. There is a large measure of self interest in this decision, but as I said at the beginning, Homo Sapiens are an integral part of the Bio-sphere, so what's good for the Biosphere is good for us and what is good for us is therefore good for the Biosphere.

Most Homo Sapiens expect this to involve sacrifice but this is not true. As we will see in Factor 6 : The Practical Creation of *Real World Assets*, this is an opportunity for endless growth, the eradication of poverty and illiteracy, and, the very foundation of a Comprehensive World Civilization.

The Evolutionary Process that has created the Biosphere is an ongoing process. Having created a rational component - humanity - the benefits so far to the Biosphere have not been good in terms of bio-diversity and environmental degradation. However, there does seem to be an awakening, even an enlightenment, amongst Homo Sapiens to the importance to the Biosphere and our place in it.

Let us take whaling as an example of this recent enlightenment. Whaling has been abolished except for a few exceptional cases - I will mention Japan and Norway here as disgraceful exceptions - and a few indigenous peoples whose lives are dependent on it. This has been a positive development in Homo Sapiens relationship with the Biosphere that will eventually bring enormous benefits to both. Recent research has shown that the world's oceans were 10 times more productive than they are today. Whale poop, it turns out, is the perfect medium for the micro-organisms that are at the very foundation of the food chain in the oceans. The more whales, the more poop the more micro-organisms the more krill the more small fish the more big fish for Homo Sapiens to eat. It has also been estimated that by applying our rationality the oceans could be 100 times more productive than they are today. I call this 'farming the oceans'. But to farm the oceans they have to be pristine which means we have to stop using the oceans as a dumping ground for our waste. Also, it is worth mentioning here, that the more productive the oceans are, the more CO<sub>2</sub> is taken out of the atmosphere. And taking CO<sub>2</sub> out of the atmosphere gives us one of the levers for controlling the climate the lever for cooling the planet down. For heating the planet up we can use the lever for increasing the amount of CO<sub>2</sub> and we know how to do that, just burn fossil fuels.

Another example of this recent enlightenment is the growing concern for the tropical rain forests. Not only do these forests take out CO<sub>2</sub> with the same benefits as the oceans but they also provide us with a rich source of biodiversity. Every forest has millions of species of bacteria, fungi, plants, vertebrates and invertebrates and each species has a unique genetic code.

Homo Sapiens are just beginning to understand the genetic code. Sequencing the genetic code of living creatures including humans has become common place. Understanding how it works, on the other hand, has just begun. How does the

genetic blueprint produce a living phenotype such as ourselves? The answer to that is poorly understood. It may take a few decades to find out but when we do then everything will change. Genetic engineering will produce everything for a vibrant biosphere and most of the knowledge we will need will come from the 3 billion years of evolution that has resulted in the amazing biodiversity we live with today and which will provide us with the genetic knowledge to transform everything, including ourselves.

Forget about artificial intelligence, all Homo Sapiens already have huge computational power in our brains. Two thirds of the neo-cortex has neurones arranged in units for processing in parallel which should give us computational power way beyond super computers. That it doesn't would appear to be a problem with the interconnectivity between brain regions; a problem derived from the brain's evolutionary past where the brain architecture was developed for specific environments during the brain's long evolution. Homo Sapiens in the future will be born with intelligence beyond our imagination and we will live indefinitely and all this with just a few genetic modifications derived from the knowledge we will gain from studying 3 billion years of evolutionary diversity in our present biosphere. We will then no longer be Homo Sapiens but Homo Intelliens.

Homo Sapiens relationship to the Biosphere is evolutionary. We have evolved to become the rational component of the biosphere and all that will bring for us and all the other species on our blue planet.

### **Factor 3 : A Regionalized World which is Multi-polar and Multi-cultural (3)**

A regionalized world which is Multi-polar and Multi-cultural (3) and where the Governing Principle is Co-operation. Homo Sapiens love their own cultures - the one they have been brought up in. They also love their own language. Culture and language, entwined entities in all individual societies.

There is, of course, a need for a common language in our Multi-polar World as good communication is essential for deep and meaning full understanding. English is already established in this role which is fitting as England is a small country of only 60+ million people and therefore doesn't claim hegemony by demographics. English just so happens to be very simple, extremely malleable and has the largest vocabulary of any language - over a million words and counting.

Our Multi-polar world is emergent. Since the start of the 21st century when it first became recognizable it has now become quite distinct. The old Uni-polar world where America was the only superpower amongst a host of Nation States is fading fast.

The Multi-polar world can already be seen in its regional settings: North America, Central America, South America, Europe, Greater Russia, Indian sub-continent, China, South-east Asia, Middle-east & North Africa and the rest of Africa. We are

fortunate in that most of these emerging poles are culturally based on the positive aspects of Our Common Humanity. Only the Middle-east and North Africa polar region are still based on the negative aspects of Our Common Humanity where Might is Right still holds sway; these will eventually succumb to the superior qualities of the positive aspects of Our Common Humanity based cultures.

The Middle-east & North African polar region has based its culture, in the main, on medieval fundamentalist Salifist Islam which is a despotic, dictatorial, misogynist, theocratic social order that has no place in the 21st century. But as Graham Green pointed out so graphically in 'The Power and the Glory' you can't suppress religions by force. This pole will need time to evolve. It will, however, need to be isolated - quarantined - from the rest of the world, to stop the singular poisonous message of hate from deluding vulnerable young people from carrying out acts of terrorism.

This does not mean we should leave them in a degraded state but should gift them via a 'Marshall Plan' for Syria and one for the rest of the Middle-east & North African polar region at least the trappings of a civilized culture - the products of science and technology (see The Example in Appendix 3 : Bounded Rationality, for a more developed exposition in regard to this issue). Once they realize that their medieval fundamentalist culture has not delivered these trappings but are totally dependent on the 'infidel' for these advances it will gradually but eventually erode the power of ignorance that medieval fundamentalism Salifist Islam represents (see Factor 4).

At one time Europe was a fundamentalist region - a Christian fundamentalist region. This was called the 'dark ages' of medieval times. Then came the Enlightenment where science proved the 'holy book' was wrong. The Earth was not the centre of the world/universe. The Earth was not created by God in seven days but was billions of years old. Then in the 19th century Darwin finished off fundamentalist Christianity by introducing evolution to explain how humanity came into being.

Although there are a few Christian fundamentalist left in Europe they would make up less than 1% of the population. We Europeans are now a post-Christian culture where we look at the 'holy book' as a collection of parables illustrating 'truths' written before the Enlightenment.

There are no post-Islamic cultural countries let alone regions. Turkey having made an excellent start in this direction is fast returning to the 'dark ages' under Erdogan's rule. There are, however, post-Islamic cultural movements that produced the 'Arab Spring'. They remain, unfortunately, a minority in their respective countries.

With all of the polar regions based on Our Common Humanity, co-operation between the poles will be natural and normal. And this is coming about through emergence via the evolutionary globalization process. Nobody planned it this way.

Co-operation between the polar regions will be essential for solving the problems the biosphere, including Homo Sapiens as an integral part, will face in the future.

This will require a complete restructuring of the organization that we use today for dealing with international problems, namely the UN. It is still a good talking shop for Nation States but the security council will need to be replaced by a Council of Polar Regions thus reflecting the Multi-polar Multi-cultural world in which we live.

There will be a need for a World Bank with its own currency. A Development bank for carrying out projects sanctioned by the Council of Polar Regions and a Censor's Office to regulate the UN and its operations.

I can't leave this Factor without mentioning the Greater Russian polar region. Russia should not have been an individual pole. It should have been part of the European pole. Russia is geographically part of Europe, its history is European and culturally it is European. It is to Europe's disgrace that after the collapse of the Soviet Union, Europe stood and watched, like bystanders at a car crash, as Russia descended into chaos. No wonder the Russian people love Putin because it was he who brought order out of the chaos via the democratic process. What Europe should have done was offered Russia a 'Marshall Plan' to resurrect the society and economy. We seem to have forgotten, If it wasn't for the sacrifice of the Russian people, 20 million plus dead, Europe would have been under the Nazis jackboot. We owe them a debt of gratitude. And although it is too late to rectify this disgraceful callousness and lack of foresight, Europe should offer Russia a place in the European Union whenever the Russian people want this. Perhaps one day.

A final word on the Multi-cultural aspect of this new era. Each polar region has a cultural similarity amongst the countries or internal regions that make it up. Even within supposedly unified countries like the UK or Spain there are cultural differences; Scotland, Wales, Northern Island and England in the UK and Catalonia, Basque and Andalusia in Spain. There are cultural differences on every scale. England has cultural differences between the north and the south and the midlands. These differences played a part in brexit because the north had felt they had been ignored by the south - the seat of power - for decades. (see Appendix 7). Cultural differences are amplified when power is perceived to reside in one region rather than all.

Who are we? Are we the Nation State we identify with or the polar region we identify with or the internal region we identify with? This is the dilemma of our times and a direct consequence of this emergent Multi-polar Multi-cultural era we have now entered. The answer is straight forward: we are all three. But first and foremost we are Homo Sapiens that share Our Common Humanity.

#### Factor 4 : The Ongoing Process of Understanding the Nature of Reality (4)

The ongoing process of understanding the Nature of Reality through science, consciousness, representation and belief (4) where the Governing Principle is research. This Factor determines the future development of our Comprehensive World Civilization. This ongoing process will provide humanity and the biosphere

with all the tools needed for advancement in all spheres of Civilization. I have chosen these 4 subjects with care so as to cover all of Homo Sapiens' knowledge of the Nature of Reality. Science provides us with an objective, rational model of Reality. Consciousness provides us with the experiential experience of Reality. Representation of Reality is a means of communicating our knowledge to our fellow Homo Sapiens, of which this piece of writing is a good example. Belief as the Homo Sapiens' quality that gives meaning to our understanding of the Nature of Reality.

Scientists believe in science just as strongly as religious practitioners believe in their religions. The difference being that scientist have rational reasons for believing in science. Too many religions only have the religious practices themselves to believe in. Let me give you an example. The 3 religions often called the 'children of Abraham', Judaism, Islam and Christianity, believe in the old testament and this has a major flaw. This was pointed out most succinctly by a Jew known as Robert Zimmerman or Bob Dylan as he is more widely known. Here it is in verse form:

Now God said to Abraham kill me a son

And Abe said, God, you must be putting me on

And God said, nope

And Abe said, what?

And God said, you can do what you want Abe but the next time you see me coming you'd better run

And Abe said, where do you want this killing done?

And God said, just take him out onto Highway 61

Here we have a God who gives Homo Sapiens free will, and that, after making Homo Sapiens in his own image, and then acts like a fascist dictator with supreme power, to get Homo Sapiens to do what he, God, wants. It is completely irrational. And yet all 3 religions believe in this nonsense. Or do they? Certainly fundamentalists do who hold that their religious books are sacrosanct as the living truth. But not non-fundamentalists, who can see that these books were written by Homo Sapiens from a specific time and place. A time when Homo Sapiens did not know what stars were, and indeed, did not know that our sun is a star. We now know that our star is one of 200 billion stars in our 'milky-way galaxy' and that we can see at least 200 billion galaxies in our universe. This makes our planet a tiny tiny speck in our universe that is at least 13.8 billion years old. To accord religious books from that time of human history any credibility in the face of what we now know about the Nature of Reality is risible.

Now the reader may assume from what I have just written that I am an atheist but this is not true. I have, in fact, a total belief in God but my definition is an experiential experience, way beyond what is expressible in words. A more formal

definition of God that I can subscribe to is St. Augustine's definition: Omni present, Omni potent and Infinite.

To give you a more emotional clue to my belief let me present a Sufi poem from India that reminds me of the Mystical nature of that amazing country. A poem that moved me as a young man when I first came across it and which still moves me today.

Oh God, thy faceless beauty enthrals me.

Thy endless body surrounds and pervades me.

Raise the veil and let us be joined in divine rapture

In One timeless moment that lasts forever.

The Sufis are a Mystical branch of Islam. They have nothing in common with the fundamentalists such as the Whahabi sect of Saudi Arabia who have more in common with Christian and Jewish fundamentalists. The Sufis have more in common with the Mystical traditions of Hinduism, Buddhism and Daoism, as indeed, I do myself.

I defy anyone who believes in God of whatever definition, or even those who only have a faint sense that there is something beyond our small lives, not to be moved by this poem.

Most cultures in our world today have a religious foundation. Europe's foundational religion was Christianity. In medieval times all Christians were fundamentalists; they believed that the Holy Bible was the living truth. After the enlightenment, where science proved that this was not the case, people began to see the Holy Bible as a collection of parables that contains great truths. Europe today is a post-Christian culture in the sense that the present culture has a Christian history. All of European culture has been transformed by the enlightenment to the point it could be considered a scientific culture. However, how these various elements of present European culture - and there are more elements than just the two (Christianity and scientific enlightenment) that I have selected - make claim to importance is well beyond my limited knowledge.

Culture is an amalgamation of our beliefs and how they are represented and interpreted, whether they are scientific or from experiential experience or from religious sources. It makes culture a difficult subject for study especially in the light that it travels around in individual human beings with all of their own idiosyncrasies. And yet, we all know what it means as a general term and as a specific identity. And further, we all understand it as an experiential experience - we know who we are in cultural terms. Europeans are culturally post-religious, enlightened (scientifically) socially liberal democrats. A world apart from the medieval fundamentalist, unenlightened, socially backward tribes of the Middle-eastern peoples that have arrived in Europe as uninvited immigrants. Culturally, we are as far apart as human beings can be and as we have seen in Factor 3 large



minorities can cause massive problems. It is partly why the solution in Appendix 3 : Bounded Rationality - Part 2 - The Example, is so very appealing.

Culturally, Europeans are receptive to The Ongoing Process of Understanding the Nature of Reality. Medieval fundamentalists are not because they think they know what the Nature of Reality is. We Europeans can have no truck with ignorance of this kind. It's dangerous.

## **Factor 5 : The Wisdom of Crowds (5)**

The Wisdom of Crowds (5) where the governing principle is education with either facts (objective information) and/or full spectrum information. The Wisdom of Crowds has some scientific bases from the point of view that it has been observed on many different levels on the Scale of Reality in the biosphere, from bacteria through insects and mammals to human beings. When collections of individual entities have access to the same information they invariably come to the right answer collectively. The theoretical framework for this is, however, unknown.

As a writer of fiction I spend a lot of my time speculating about possible outcomes to story lines. Speculation is normal for me and as such I can't help but speculate about why the Wisdom of Crowds is always right. For those with an aversion to speculation it would be best to look away now and skip this section.

{I have long thought that reality has a dual nature, one which is holistic and contains all possible possibilities, the other is confined in the realm of 'cause and effect' that delivers the 'arrow of time'. Everett, the mathematician who gave us the 'many worlds' interpretation of quantum mechanics probably came closest to the holistic nature of reality. He speculated that every time anything makes a decision the entire universe splits into two as both decisions take place except in two different universes. In the holistic universe where every possible possibility exists in a quantum entangled superposition, there are entities mapping a way through this multi-dimensional maze like Homo Sapiens living their 'cause and effect' lives. Only when individual Homo Sapiens band together in a referendum to solve a problem collectively they drop into the holistic nature part of reality where all possible possibilities exist and the perfect solution simply drops out of the holistic 'many worlds' nature of reality into the 'cause and effect' nature of reality. This explanation of why the Wisdom of Crowds works now becomes a crucial piece of evidence in proving the dual nature of reality and showing the relationship between the two or at least part of it.}

A lovely bit of speculation. I recommend speculation to everyone, not only is it fun but there is always the chance that you might discover something new about the nature of reality and add to the great knowledge bank of Homo Sapiens.

I digress.

There are many different forms of the Wisdom of Crowds so let us take just one as an example. Let's take human beings being presented with the factual evidence of

their own eyes: At a country fair people were asked to guess the weight of a cow. So called experts, farmers, vets etc were asked to guess and their individual guesses recorded. Ordinary people visiting the fair were also asked and their guesses were also recorded then the total was added up and then divided by the number of visitors that had made guesses. The experts were close but the visitors, once their answers were averaged out, were spot on. This is The Wisdom of Crowds in action on the human level. It does have many different forms on the Scale of Reality and many different forms on each of the levels on the Scale of Reality.

Many people have said that democracy is a form of the Wisdom of Crowds and if citizens were voting on specific issues no doubt it would work. But as citizens in Europe and America and in other democratic countries vote for political parties where many issues are collected under one banner this cannot work because different people hold different views on different issues. Why democratic systems are breaking down all over the world is largely because of this reason. The time has come to allow citizens to vote on the issues.

Now this seems to be common sense but to make it work you have to provide all citizens with the same facts and these facts need to be scientifically verified. And of course this is easier said than done, especially with complex issues. But this is not a problem that will go away.

The Chinese have found 'a' solution by sampling what concerns the Chinese people in large opinion polls and doing this as an ongoing process. It's not perfect but it is a start in the right direction. This method of polling the Chinese people has led the Chinese government to add 2 further goals to the Communist Party's original goal of raising the Chinese out of poverty. They have added the goal of removing corruption from all areas of Chinese society and the third goal of tackling environmental problems both nationally and globally. Nobody can argue with these goals which are, after all, not only the concerns of the Chinese people nor can anyone argue with how they were derived; polling is a form of the Wisdom of Crowds.

Polling, however, is not without its problems. The last general election in the UK wrong footed the pollsters as they forecast a hung parliament but which delivered a majority Conservative government. There has been much debate on why the pollsters got it wrong from 'wrong weighting' to asking the 'wrong people'. I jest not.

If there was ever a need for research into the subject of the Wisdom of Crowds, which can be a powerful tool into arriving at correct answers, then this is the time.

With all of the technology and communication systems available the Wisdom of Crowds time has surely come. And just think how relieved our politicians will be (not), that they don't have to make decisions on subjects they don't really understand. This new Multi-polar Multi-cultural era we have entered is going to be bad for politicians who will be reduced to debaters but good for Homo Sapiens, who, acting collectively as a whole, will always make the right decisions.

In the UK we have a constituency based political system. You vote for a representative for your area. This delivers the members of parliament. And who would wish to get rid of this theatrical debating chamber. Watching Prime Minister's question time is a simple pleasure where animal noises and rude comments vie with serious comment on any issue. The 'zoological theatre of the absurd' it may be but freed from party politics it could be an excellent debating chamber on issues affecting constituencies in a National and European context.

However, for important issues nothing but objective information and the application of the Wisdom of Crowds will do in our Multi-polar Multi-cultural era.

## **Factor 6 - The Practical Creation of Real World Assets**

### **An Introduction to the Practical Creation of Real World Assets to Achieve a Comprehensive World Civilization (6) where the Governing Principle is an Economic Operating System Fit for Purpose**

In our painting metaphor, Factor 6 is the figure being portrayed, where the body, limbs and clothing are the *real world* assets, and where the head is the Governing Principle wearing the face of the Capitalist operating system. Could the reason why the 'Mona Lisa's smile' is so enigmatic is because she knows a secret that the viewer does not? Here in Factor 6 I will reveal what that secret is.

### **Introduction**

*Real world* assets are not just buildings such as homes, schools and hospitals or infrastructures such as roads, railways, airports and sea ports but also power generation units and also bio-assets such as greened deserts and farmed oceans, and yes, even individual Homo Sapiens. These *real world* assets will all be needed in the creation of a Comprehensive World Civilization.

Remember from the Introduction the definition for our economic operating system for this Bounded Rationality:

A process by which *real world* assets can be brought into being by the use of a 'medium of exchange', money, and where money has no intrinsic value of its own.

While at the same time providing a living for the individual Homo Sapiens that are involved in the process of bringing *real world* assets into being.

## The Governing Principal - The *Real World* Economic Operating System

To understand the Governing Principle, and as a consequence, an understanding of the *real world* economy, it will prove informative to have a look at the two operating systems in operation at the present time: Free-market capitalism and State-directed capitalism. We will visit both of these to see what we can learn and how this knowledge can be applied in the formation of an operating system fit for purpose in the construction of a Comprehensive World Civilization.

### Free-market capitalism.

Free-market Capitalism has served us well for the past 200 years. It has given us a growth rate of 2.9% year on year right up until the mid 1980 when deregulation brought that era to an end. 2.9% is considered to be the 'natural' growth rate of Free-market Capitalism.

The present state and recent past of Free-market capitalism is unhealthy. This can be seen in the series of economic crises that started with the Long Term Capital Management crisis of 1998, followed by the Asian crisis, the dot.com bubble and had its last manifestation in the 'credit crunch' crisis of 2007-8, before the present [201?] crisis and yes, there will be another one. As Ben Bernanke put it so pithily: There are 3 things that you can always count on; God, Taxes and economic crises.

The roots of these recent crises stem from the 1990s when banks moved away from their historic primary role of providers of credit to individuals and companies for the purpose of the creation of *real world* assets. As just stated *real world* assets are things like buildings such as homes, schools and hospitals or infrastructures such as roads, railways, airports and sea ports but also power generation units and also bio-assets such as greened deserts and farmed oceans and individual human beings. But not services like hotels, entertainment, restaurants and Insurance.

Service industries, however, help promote the creation of *real world* assets and so contribute in a small but secondary capacity to the creation of *real world* assets. But not Insurance, which makes a far more important contribution to civilization if not to the direct creation of *real world* assets.

Insurance is a Homo Sapiens invention that helps to alleviate the problems that the risks of the *real world* throw at us. The money collected from individuals for insurance purposes is invested by the Insurance industry in banks and equities for the creation of *real world* assets, thus contributing to the growth rate. This, however, does not make up for money taken out of the banks by individuals for Insurance and which is not available for the creation of *real world* assets.

Consequently insurance makes an overall negative contribution in terms of the growth rate, usually measured in terms of the General Domestic Product (GDP), in that money spent on protection against risk is not money spent on the creation of *real world* assets.

The Insurance industry also provides an important service in that it allows for risk-taking in the creation of *real world* assets. Innovations, so important in the development of civilization, are often risky affairs. The benefits of Insurance in this regard, however, are not quantifiable. Even if it was it would still leave Insurance with an overall negative contribution to the growth rate of Free-market Capitalist economies. We will see the problems this has caused when the banks moved into the Insurance industry in what follows.

The banks branched out into Insurance via new financial instruments (derivatives) into Credit Default Swaps (CDS) and Collateral Debt Obligations (CDO), which 'by rights' should have belonged to the Insurance Industry as they are 'risk mitigation' instruments. The banks were providing Insurance for the financial world, in much the same way as the old Insurance industry provided Insurance for *real world* assets.

Bankers J P Morgan are credited with the introduction of modern CDS in 1994 and later with CDO in 1997. J P Morgan developed a proprietary product that used CDS to clean up a bank's balance sheets. The advantage of this innovation was that it used securitization to split up the credit risk into little pieces so that smaller investors could participate in what was the beginning of an entirely new market - the 'derivatives market'. Unfortunately, these innovations have mutated the entire Free-market Capitalist system.

CDO played a major role in the 2007-8 crisis as bad debt (sub-prime mortgages) were mixed with good debt, thus poisoning the entire system with risk rather than dispersing it, which supposedly had been the original intention.

Ignoring the technical jargon (designed to confuse the uninitiated) and the bankers supposed good intentions (designed to cover up their dubious moral position), there are 2 vital facts to be said about these derivatives, first, the banks have moved away from their primary capitalist function of supplying credit for the creation of *real world* assets, and second, have moved instead into the Insurance

industry. These 2 mutations in the Free-market Capitalist operating system were introduced without consultation or regard to the rest of world.

Once created the 'derivatives market' has taken on a life of its own, with anyone able to buy and sell Insurance, and, for whatever purpose, including gambling. Third parties can take out Insurance on companies who have nothing to do with them - gambling that companies will default on their debt and hence will claim against Insurers when they do. This is what has become known as 'casino capitalism'. It does not contribute to the creation of *real world* assets in any way shape or form, and hence does not contribute to growth in the *real world* economy.

The 'derivatives market' is like a cancerous growth in the *real world* economy's body. It feeds on the economy's body for its own development as not a single penny of the £500 trillion plus market has ever produced any *real world* assets.

The fact that Insurance contributes an overall negative effect on the growth rate of the *real world* economy, that increases enormously with the huge amounts of money, £500 trillion plus, that passes through the financial Insurance industry, then it is easy to see how the 'derivatives market' is draining Free-market Capitalism of its life's blood. It represents as much as 1 - 1 ½ % decrease in growth rate, thus reducing the normal growth rate of 2.9% for Free-market Capitalism to between 1.9 % and 1.4 % - this is the growth rate the developed world has at present when averaged out over the financial cycle. These figures are, of course, *guesstimates* as nobody in the financial world has seen fit to either work them out properly, or, prove that it is impossible to work them out, which is a distinct possibility, such is the complexity of the 'derivatives market'.

Here then we have the new mutated form of Free-market Capitalism that has the 'derivatives market' as part of its operating system but which is almost half as efficient as Free-market Capitalism without the 'derivatives market'. Until the 'derivatives market' is cut out of the economic body then the *real world's* economy is doomed to a decreased growth rate just when an increased growth rate is required to bring more than half of the world's population out of poverty. Reducing poverty is important as there is a direct relationship between poverty and population; poor people have more children and overpopulation is a major *real world* problem.

It should be stated here that there were other factors in the 'credit crunch' crisis of 2007-8. There was excessive leverage (see Appendix 4 : Leverage - The Real Magic of Capitalism), 30-40 times the capital base where before deregulation in 1986, 20 times was the norm. All the banks had become too dependent on the money markets for their funding which when it dried up during the last crisis left most of them with a liquidity problem (without any cash).

These malpractices have conspired with the banks move away from Capitalist fundamentals, exemplified by the creation of the 'derivatives market'. The idea that a bank's primary function is providing credit for the creation of *real world* assets seems to have been lost in the desperate bid to make money for the bankers themselves.

Making money out of money, where money in the modern world is only an abstraction - it has no intrinsic value of its own - is a folly of the first order. (see Appendix 5: The Tenets of Capitalism and below).

Most people take money for granted but for an understanding of the *real world* economy an understanding of what money is, is essential.

### **Money : From Whence it Came to Where it Went, or more like, What it has Become**

Throughout most of the world's history money did have an intrinsic value. Up until 1971 in the western world, gold and silver were related directly to paper money, even today our British currency still has printed on it the words, 'I promise to pay the bearer on demand the sum of £20'. 20 pounds in weight of sterling silver, that is. Obviously a complete nonsense. What it should say is, 'I promise to pay the bearer on demand the sum of 20 units of the British 'medium of exchange'.

In China during most of the Imperial Age (221 BCE - 1911 CE), money was made from bronze coins. Chinese money during the Imperial Age is most informative about money in general. The metal itself had *real world* value, as bronze was capable of being melted down and turned into many useful and practical things. However, this dependency on metal, which after all has to be mined, caused many problems in terms of supply and demand. Consequently the intrinsic value and the value of money as a 'medium of exchange' varied, this to the detriment of China's citizens and governments alike. The Chinese who first used paper money during the Song Dynasty had to equate their paper money directly to 'copper cash' as the bronze money was known, and even then the Chinese people found it hard to accept paper money. Twice during the Song dynasty the government had to exchange all the paper money for copper cash just to show that what it said on the paper money was true, 'I promise to pay the bearer on demand the sum of X number of strings of copper cash'. Copper cash had a square hole through the middle so that they could be strung together in tens, hundreds and even thousands.

A scholar official of the 12<sup>th</sup> century, She Ye, was the first man to contemplate money as purely a 'medium of exchange' and could see the enormous potential. Not that he had much chance of introducing money as purely a 'medium of exchange' when the Chinese people wouldn't even accept paper money as a government recognized substitute for metal money. She Ye was 1000 years ahead

of his time. However, I suspect that the Chinese economists employed by Deng Shao Ping to bring about the present economic miracle in China, were fully aware of him and what he knew about money as purely a 'medium of exchange'.

Since the invention of paper money in the west, what is now the developed world, had the same problems the Chinese had several centuries before. It is only since contemporary Capitalism moved to the use of money as only a 'medium of exchange' - an abstraction - where the intrinsic value is only worth the paper it is printed on, that Capitalism has moved into a new era. Electronic money is an even greater abstraction - at least with paper money you can eat it. This is not a criticism of money as an abstraction. Here we have money in its purist form as a 'medium of exchange', where it is used as an 'index of value' for every conceivable *real world* asset and as a 'store of value', where its convenience has enhanced the efficiency of Capitalism.

Research reveals at least a dozen definitions of money and even more explanations of its uses. Thankfully, the entire *real world* economy is safely anchored in money as purely a 'medium of exchange'. Nation states may argue about what is the correct exchange rate between their respective 'medium of exchange' - America and China spring to mind - but no one is arguing about what money is or what its use is. This is a huge positive for the global economy.

We have to thank US President 'Tricky Dicky' Nixon for this as he took the US dollar off the gold standard in 1971. So it is to him we must thank for Quantitative Easing (QE).

## **The Consequences of the Introduction of Financial Innovations Without Scrutiny**

Like most mutated forms in nature this mutated form of Free-market capitalism is doomed to failure. Especially as no country, economic regulatory body, or global organization like the IMF or the World Bank, has taken the required steps to cut the 'derivatives' cancer out of the *real world's* operating system. And more importantly none of these economic regulatory bodies have seen fit to put an end to the practice of introducing new financial instruments that don't have a 'proof of viability'.

Free-market Capitalism must be the only subject where 'proof of viability' is not a required norm before ideas are introduced into the *real world*. (see Appendix 5: The Tenets of Capitalism). Can you imagine medical scientists introducing a vaccine into the general population that hadn't been through rigorous biological testing before being trailed in control groups, and only then introduced into the general population? This is the equivalent of what happened when the Free-market Capitalist bankers introduced 'derivatives' into Free-market Capitalism. They neither provided 'proof of viability', nor were 'derivatives' tested in one part of the



market to see how they performed. Instead they were rolled out under the guise of brilliant financial innovations that were going to end 'boom and bust' forever.

Having abandoned the 200 years of precedence that formed the legitimacy of Free-market Capitalism prior to the 1986 deregulation of financial institutions; remember, there is no theoretical framework (see Appendix 2: Complexity and Economics). So there is only precedence to provide legitimacy. Were the banks testing the system to destruction? Did the bankers believe their own rhetoric? Or, having been freed from regulation in 1986 were they simply been driven by their own hubris, with ignorance disguised as superior knowledge and acting as a cloak for their greed and selfishness, and all this to the detriment of the greater good?

This brings up the question of human psychology in economics.

## Human Psychology in Economics

Shen the Sage King (1700 B.C.E.) pointed out that man's mind was precariously positioned between greed and selfishness on one hand and generosity and altruism on the other. Chinese philosophy in many respects is founded on this understanding of human nature - as true today as it was 3700 years ago. If we were all to be honest, we would admit as much, then perhaps we could take the advice of the greatest of Confucians, Mencius, who said it was best to err on the side of generosity and altruism as this leads to a harmonious society, while greed and selfishness leads to conflict, jealousy and a discordant society.

It is possible to guard against these traits of the human mind through education and self-cultivation but this takes a cultural change as large as a paradigm shift. The self-centred individualistic culture of the west tends to promote these negative aspects of Our Common Humanity; transforming this from competition to co-operation, to considering the greater good as much as self-centred gratification will take a sea change in cultural awareness. It can be done - Homo Sapiens, whatever their race have exactly the same biological and psychological makeup and so share Our Common Humanity' (see Appendix 1: Our Common Humanity). It is only our cultural traits that make the differences. It will be difficult to change as cultural traits set in childhood have strong claims on the adult.

If the Free-market Capitalist system has been mutated by Free-market Capitalist bankers, who are these people? Are they Capitalists with pretensions of being scientists? They are not even that. Most of these bankers hold a masters degree in business administration, a MBA. The sole purpose of business administrators is to make a profit for their companies, and by extension, as much money for themselves that they can get away with. These people should never have been allowed to mutate Free-market Capitalism. They are not even the right people to operate Capitalism let-alone transform it. If our past crises should teach us anything it is that governments - the representatives of a country's citizens -

should be in control of the *real world* economy and its operating system. If we live in democracies, then democratically elected governments are the only legitimate body that should control and operate Capitalist systems. This is just common sense.

Allowing Homo Sapiens who have the negative aspects of Our Common Humanity to be in charge of any part of Capitalism or the *real world* economy is just asking for trouble. And that is exactly what we have right now.

## Summary of Free-market Capitalism

So what have we learned about today's Free-market Capitalism that we can carry over into a new economic operating system fit for purpose.

First, this present Free-market capitalist system is a mutated form of Capitalism thanks to the derivatives market and as such it is less efficient, reducing the normal growth rate of capitalism from 2.9 % to less than 2%.

Second, that the 'wrong people' are running this economic operating system and running it for their own benefit and not for the benefit of the world's citizens.

Third, that our politicians, academics and journalists are trapped in a 'bubble of wishful thinking' when it comes to Free-market Capitalism and the people that govern it. It's a bubble that needs to be burst and reality confronted.

Fourth, It should be obvious that a governing principle is needed for our new economic operating system. May I suggest fairness or as Mencius would have named it 'moral principles'.

Fifth, any future economic system must ultimately be controlled by the elected representatives of the world's citizens and for the citizens benefit.

Sixth, innovations to the economic operating system should be treated like vaccines in regard to disease, with all the rigour of the scientific method brought to bear before their introduction into the world's economy.

## State-directed Capitalism

The second economic operating system in operation in the world today is Chinese State-directed Capitalism, and thankfully, this is in rude good health. The Chinese, new to capitalism and having being warned by Deng Shao Ping that 'entering capitalism was like entering a fast flowing river where the only way to proceed was by taking one step at a time and feeling the bottom for a safe foothold', were wary, and were not convinced of the value of CDS or CDO, as they did not produce *real world* assets. They have only allowed CDS use in a tiny part of their market - the interbank bond market. Where they are subject to stringent regulations: they

may only be sold to investors holding the underlying assets (this stops third party speculation) and can't be used to insure high risk securities. Also the value of the CDS cannot exceed 5 times that of the underlying debt and will only insure debt for 1 year. They have not allowed CDO at all.

State-directed Capitalism has stuck to the fundamentals of Capitalism except for one overriding feature, and that is, that the Chinese government owns and control the banks, all 29 of them. As a consequence they can direct their banks to do their bidding - hence State-directed capitalism. They can also stop them from any risky innovations, and as the CDS and CDO example above exemplifies, they do.

This is a hybrid form of Capitalism because in Free-market capitalism banks have complete freedom to do as they please and, as we have seen above, with disastrous consequences.

A useful example of how State-directed capitalism works can be seen from what happened in the spring of 2011. The Chinese central government decided to pay off the provincial governments' transport infrastructure debt that was owed to Chinese banks - a small matter of  $\frac{1}{2}$  a trillion US dollars.

Some years previously the Chinese government had informed the provincial governments that they were to build the transport infrastructure in their towns and cities to meet up with the central government's construction of the nation-wide transport infrastructure project. The provincial governments borrowed the money from the Chinese banks who had been instructed by the central government to loan them the money. On completion the provincial governments handed over the transport infrastructure in their area to the central government. In return the central government paid off the debt of the provincial governments to the banks. They were able to do this as the transport infrastructure represents a 'store of value' in the 'medium of exchange', which was produced by having the transport infrastructure valued along market lines by the 'index of value'. The fact that the transport infrastructure was built to last for at least 100 years the 'index of value' made the value of the transport infrastructure worth far more than what it cost to build. This is represented in the equation:  $\text{value} = 2X+$  where X is the cost to build.

This is merely an accounting exercise - a means of balancing the books of the provincial governments, the Chinese banks, and, the Chinese state accounts. This is made possible because the transport infrastructure system is a *real world* asset, and most importantly of all, as a *real world* asset, it represents real wealth.

This enormous project will in the end cost trillions of US dollars, taking into account the construction of airports and sea ports, but, because when it is finished it will be worth a lot more than the cost to build, the markets (both internal and external to China) consider this in a positive light. This is because *real world* assets count as collateral on the Chinese government's accounts. As a result the central government can print money against the *real world* asset of the transport infrastructure they hold. Thus allowing China to have its cake and to eat it as well.

This rather neat Capitalist system allows China to build a 21<sup>st</sup> century technological civilization with printed money, or, to be more precise, electronic money. This is a form of 'fundamental leverage' (see both APPENDIX 4 & 5)

It must be said here that Chinese banks do not only provide money for State-directed projects. They still provide the same service for individuals and companies for the creation of *real world* assets that Capitalism has always provided. However, this is done in a structured way that allows the self-organizing ability of Capitalism to achieve its full potential.

An excellent example of a successful State-directed Capitalist project that also utilizes the self-organizing ability of Capitalism is the Pearl River Delta Conurbation. This region stretches along 90 miles of coast from Shenzhen to Guangzhou. There are now 135 million people living there, approximately the same population as the UK and Germany combined, or the population of Japan. It is an urban paradise of exquisite beauty that also so happens to be the most efficient and productive region on the planet. This modern day miracle has taken a little over 25 years to build. A modern day miracle indeed.

The problems of the mutated Free-market capitalist system do not arise in State-directed capitalism because money is only being created to facilitate the creation of *real world* assets. They do not allow money to be created out of money. By sticking to the fundamentals of Capitalism while giving control over how it is applied to their government, they have produced a hybrid form of Capitalism that is extremely potent.

This hybrid is a combination of Capitalism's self-organizing creativity for producing *real world* assets and the rational application of how to maximize this by state control.

This hybrid form of Capitalism is transforming China into the first 21<sup>st</sup> century civilization, with a degree of modernity and speed of construction that can only be dreamt of in the present mutated Free-market Capitalist countries.

Recently Free-marked Capitalists have been spouting with a wicked glee about the disastrous collapse of the Chinese stock market. What they don't tell you is the Chinese stock market makes up only 17% of the Chinese economy and the other 83% is made up of State Owned Enterprises (SOEs). Since 2013 all SOEs are now profitable - they needed time to modernize. Does this mean that the Chinese government receives the profit? No, it does not. The profit goes into research and development making these SOEs even more efficient, productive and innovative.

As the late Sam Walton pointed out (Sam was the founder and owner of Wal-Mart the most successful company in American history) that he couldn't understand how share owning companies could hope to compete with him because he didn't have to pay shareholders. China's SOEs are in the same position. How will share owning companies hope to compete with Chinese SOEs. The answer is that they won't be able to.

Also, because the Chinese have discovered how to create *real world* assets by printing money they are able to boost their economy any time they want. They could for instance decide to paper over a part of the Tibetan plateau with rolls of solar cells; a recent invention by a Chinese SOE. Having built their new civilization on electricity they could easily derive all the electricity they need from solar power. Collecting the energy in Tibet and transporting it all over China by direct-current power lines. Such a project along with storage technology and electric car production would cost trillions. Boosting the economy into double digit growth any time they want and lasting for decades. And all done by printing money.

They could also decide to green the Gobi desert. A project that could also take decades and cost trillions, but, as it would be a *real world* asset that would last indefinitely, it would be worth far more than however much it cost. Here we see the advantage in not having to produce short term profit for share owned companies. Long time lines are another huge advantage for State-directed Capitalism.

So what have we learned about China's State-directed Capitalism that we can carry over into a new economic operating system fit for purpose for creating a Comprehensive World Civilization.

First, being able to direct banks where and for what purpose to create money to create *real world* assets has provided great advantages in the development of China into the 21st century civilization it is today.

Second, SOEs have the advantage over share owning companies as they don't have to pay share holders making them both more efficient and innovative.

Third, there are no time limits on investments and as a consequence long term projects are not just feasible but desirable.

Fourth, China's economic operating system, State-directed Capitalism, has benefited by having a clear goal. A goal set by the government and that goal is the raising out of poverty of 1.4 billion Chinese people. It always helps to know where you are going. And that is, after all, what my MS Civilization is all about, a plan and roadmap to a Comprehensive World Civilization; the goal that we must achieve by the end of this century.

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## **Comparison of Free-market Capitalism and State-directed Capitalism**

Comparing these 2 forms of capitalism in purely growth terms reveals that Free-market capitalism has had a growth rate of 2.9%, year on year, for the past 200 years, while State-directed capitalism has achieved, 10%, year on year, for the past 30 years (averaged out over that period). The reason often given, by Free-marketers, why this remarkable difference has occurred is that China has cheap labour and controls its currency. This is patently rubbish as Free-market capitalism

had nothing but cheap labour for all of its 200 year history and during that period currency control was practiced by all of the Free-market Capitalist countries for a majority of the time. Yet it never managed more than a 2.9% annual growth rate - this is still considered by Free-marketers as the normal growth rate of Capitalism.

State-directed Capitalism, consequently, is 3 times more efficient than Free-market Capitalism, and is 5 times more efficient than the present mutated form of Free-market Capitalism.

On this evidence alone, the mutated Free-market Capitalist system should be replaced in nation states by the hybrid form of Capitalism known as State-directed Capitalism.

This is not likely to happen until the present economic operating system either collapses, and/or, a 'sea change' is brought about by 'grassroots' movements demanding such a change.

Demands for change will be ignored. The vested interests of the present Free-marketers will no doubt put up stiff resistance to anyone challenging their privileged position in the present Free-market Capitalist system. Both political parties in America will offer resistance - Americans generally think of themselves as swash-buckling Free-marketers and Free-market Capitalism as American as apple pie. Free-market bankers and the ensemble of financial organisations, like hedge funds and speculators that benefit from the present system will put up stiff resistance to any change. We have already seen to what lengths these vested interests will go to, in retaining their 'God given right' to use Free-market Capitalism in their own interest. The resistance they have shown to the implementation of the Frank-Dodd regulations in America, and to regulatory proposals in Europe, such as the introduction of the Tobin Tax - a tax on financial transactions - are good examples of this.

However, the tide of history is against them as State-directed Capitalism is proving to be a far more efficient and productive system than Free-market Capitalism ever was. There is also the ground swell of public opinion that can be seen throughout the developed world against the simple unfairness that Free-market Capitalism represents, where the tax payer pays for the mistakes of the vested interests, while the vested interests claim the lion's share of the dubious and fast disappearing benefits. Inequality and economic stagnation are now the norm and it's all down to the wrong economic system being run by the 'wrong people'.

Most importantly of all is that Free-market Capitalism, even in its non-mutated form, is incapable of solving the global *real world* problems of the 21<sup>st</sup> century. It simply doesn't have the mechanism of coordinated cooperation as part of its remit that will be required to act on the global scale to resolve the *real world* global problems - that will take World-directed capitalism (see below: The Plan and Roadmap for a Comprehensive World Civilization).

The decision to replace the global economic system of Free-market capitalism by State-directed and World-directed capitalism is inevitable and from this

comparison of these 2 capitalist systems the decision to change is just common sense.

## The Best Kept Secret

In the painting metaphor we have arrived at Mona Lisa's smile. That enigmatic smile that shouts out 'I have a secret you the viewer doesn't know'. The artist, Leonardo, obviously, does know. And here in this metaphor, I am Leonardo.

That secret is: that State-directed Capitalism is superior to Free-market Capitalism because the Chinese learned that it was possible to print money to create *real world* assets in a world where money is only a 'medium of exchange'.

This can easily be proven as I will show below but first a warning. Statistics are slippery shape-shifting facts that can be used to prove virtually anything. As such I recommend that you, the reader, search out the statistics you want to use and the methodology as well, to verify what I am presenting. We can only ever hope to talk in 'ballpark' numbers but that is all that is required as the amount the Chinese printed is so enormous that it is blatantly obvious.

I have taken the first 15 years from 1989 to 2004 to use as the illustration as from 2005 up to 2015 the statistics and methodology are far more complex.

Keep it simple as my old maths teacher used to say. So here is the simple equation that will reveal the total amount in billions of US dollars in 2004 that the Chinese printed to create *real world* assets.

Total Amount of Printed Money (TAPM) = Total Worth of China (TWC) in 2004 - [Total Amount of Foreign Direct Investment (TAFDI) from 1989 to 2004 + Total Amount of Foreign Earnings from Exports (TAFEE) from 1989 to 2004]

$$\begin{aligned} \text{TAPM} &= \text{TWC} - [\text{TAFDI} + \text{TAFEE}] \\ \text{TAPM} &= 11,000 - [500 + 1,500] \\ &= 11,000 - 2,000 \\ &= 9,000 \end{aligned}$$

The Total Amount of Printed Money was 9,000,000,000,000 or 9 trillion US dollars worth of Chinese Yuan.

The Chinese never had any money to start with, they were never given any, they only borrowed a tiny amount and yet in by 2004 they had already created a civilization worth over 11 trillion US dollars. The vast majority of it, as we can see from the calculation above, in the form of *real world* assets created from printed money.

Printing money, when money is only a 'medium of exchange', to *create real world* assets, really is a secret that has been well kept. It means you don't have to borrow money to create *real world* assets, all you have to do is print it.

This changes everything.

The Chinese were never going to say anything in fear of starting an ideological war with Free-market Capitalist America. And Free-market Capitalist Americans, at least those ones that knew, were never going to say anything because it would have been the end of Free-market Capitalism and of course the end of the 'grave train' for vested interests.

So many people have wondered and for quite some time, why, when Quantitative Easing is just printing money, that this hasn't caused inflation. It is the same reason why it is possible to print money for creating *real world* assets. We are, since 1971, living in a world where money is just a 'medium of exchange' and has no intrinsic value of its own.

The Secret is now out. It is now time to act on this knowledge.

## **The Plan and Roadmap for a Comprehensive World Civilization**

When this period of the history of the world is written one thing will clearly stand out, and that is, the vast majority of Free-market Capitalist politicians, academics and journalists were so absorbed in Free-market Capitalism's intricacies that they failed to notice that China had developed Capitalism into a far superior form. This failure stems from a psychological feature of man's ability to reason. The attention of those confined inside of their own Bounded Rationality cannot see beyond the predominant set of Factors that defines it.

This failure to see outside of the Bounded Rationality of Free-market Capitalism applies to Homo Sapiens' failure to look outside of the present Free-market Capitalist operating system to see the advantages of the other operating system of State-directed Capitalism.

The Plan and Roadmap I have set out below has Homo Sapiens taking on the responsibilities of the planet. This depends on the right economic operating system to bring it about because the *real world* and the economic operating system are indeed joined at the hip.

To achieve the goal of Homo Sapiens becoming the custodians of the planet because of our place as the rational component of the biosphere (see Introduction), the right economic operating system must be employed. As we have already seen from the section on Free-market Capitalism, Free-market Capitalism doesn't have the Factors in its Bounded Rationality to resolve *real world* problems. It is missing the Factors of direction, planning, long term time lines and cooperation that are found in State-directed Capitalism that are essential Factors needed to produce a Comprehensive World Civilization.



If State-directed Capitalism didn't exist then we would need to invent it if we are to resolve the *real world* global problems we now face.

Not only does State-directed Capitalism contain the essential Factors of direction, planning, long term time lines and cooperation but it also makes use of the fact that money is *only* a 'medium of exchange', which allows for the creation of *real world* assets by printing money; as long as there is proof of both scientific/ engineering and financial viability.

We have to thank the Chinese, who, new to Capitalism, were considering all of the fundamental tenets (see Appendix 5 : The Tenets of Capitalism), and were consequently not confined to the historic Factors of the Bounded Rationality of Free-market Capitalism. They were also willing to employ these fundamental tenets in conjunction with state direction into the hybrid economic system known today as State-directed Capitalism. This hybrid with a full complement of fundamental Capitalist tenets and a *real world* master plan for bringing 21<sup>st</sup> century modernity to China is proving to be a very successful development of Capitalism.

Listening to present day Free-marketers, trapped in their Bounded Rationality, they equate China's growth rate of 8-10% as a function of cheap labour and currency control. They point to what happened in Japan during the 60s where there was 8-10% growth rate. What they don't point out is that during the 70s Japan's growth rate dropped to 5%, and then dropped further to 4% in the 80s and to 1.5% in the 90s, it then contracted in the 00s by 1.2% in 2008 and by a further 5.0% during the period 2009-15. China's growth rate has remained constant at 8-10% during the 80s, 90s and 00s. In the 2010s the Chinese government reduced the growth rate to 7%, because they were unable to keep up with the overall management of a 8-10% growth rate in their economy; they stated this in 2011. No one in the West seemed to notice this, or more like, chose not to acknowledge it because it didn't fit in with their views.

The difference is Japan is a Free-market Capitalist country; China is a State-directed Capitalist country.

Until the developed world adopts State-directed Capitalism the developed world will be stuck with a growth rate of between 1.5-1.9 %. This requires those stuck in the Bounded Rationality of mutated Free-market Capitalism to shift their attention to the Bounded Rationality of State-directed Capitalism (see Appendix 6 : The Bounded Rationality of State-directed capitalism). This is as much an exercise in human psychology as it is in understanding the new economic Factors the Chinese have brought into play in State-directed Capitalism.

Until the new science of complexity provides mankind with a scientific economic system then Bounded Rationality is the only tool available for producing not only

an economic operating system but a world view. If this world view is to be successful it means adopting the right Factors for its Bounded Rationality: A *real world* goal rather than the economic crises of Free-market Capitalism; a *real world* goal with an economic operating system - State-directed Capitalism - that can deliver that goal.

The Chinese government's intention to bring China to a state of 21<sup>st</sup> century modernity for the benefit of its entire people is more than just commendable; it also shows how important having a direction was to their Bounded Rationality'.

The Bounded Rationality we need for the future must contain this important factor - the right direction. Homo Sapiens have been geo-engineering the planet for the last 7,000 years without knowing it. It is time to geo-engineer the planet with purpose and thus to claim responsibility for the stewardship of the planet that only Homo Sapiens can as the rational component of the biosphere.

If State/World-directed Capitalism provides us with the economic tool (the Governing Principle for Factor 6) then the Practical Creation of *Real World Assets* should be our main concern and direction in Factor 6 to bring about a Comprehensive World Civilization.

## **Factor 6 - The Practical Creation of *Real World Assets* for a Comprehensive World Civilization**

I have spent a long time on the Governing Principle of Factor 6, that is, the economic operating system. And that is because it is very important. It also illustrates how useful my innovations to Bounded Rationality are - namely, the use of Governing Principles for the Factors, the proactive direction and the introduction of a Time Factor.

Having arrived at the body of the figure in the metaphor - *Real World Assets* - I must remind the reader that Factor 6 in this Bounded Rationality must be practical, so let us take 3 examples:

- 1) Energy
- 2) Bioengineering and Biosphere Engineering
- 3) Printing money to provide 'Marshall Plans' for under developed polar regions in our multi-polar multi-cultural world.

And see how this can radically enhance the bio-sphere and produce a Comprehensive World Civilization.

## 1) Energy - Changing the Power Supply

Fossil fuels can only ever be a temporary source of power for human civilizations as they are finite. Solar power with at least 1 billion years supply and with decreasing costs to collect makes the transference to this form of power an obvious decision to make. Solar power also helps to resolve so many of the *real world* problems, in particular, climate change.

This transference requires huge investment measured in trillions of Euros, but where money as a 'medium of exchange' can be printed to create *real world* assets this has the added benefit of pumping trillions of Euros into whatever economy that adopts this strategy.

The Chinese will have no problem in carrying out this transference as they already have the means by which to do this - State-directed Capitalism.

On the other hand the developed world's mutated Free-market Capitalist system can only do this if they adopt features of State-directed Capitalism.

Free-market banks are not controlled by their governments so it is impossible for them to be co-ordinated to carry out such a task. If the nationalization of the banks is unpalatable to those weaned on the Bounded Rationality of Free-market Capitalism then national development banks controlled by governments will have to be created.

Take the EU as an example:

There is nothing to stop the European Union - with its sunshine regions of the Mediterranean - from carrying out this transference from fossil fuel to solar power. There is nothing to stop the European Central Bank from printing money to capitalize a European Development Bank for the specific purpose of creating a solar powered Europe.

The Germans have been reluctant to turn the European Financial Stability Facility (EFSF) into a bank so the facility can be leveraged, because, and for very good reasons, this money would be to pay off debt, and would not be for the creation of *real world* assets. However, a European Development Bank for the specific purpose of transferring Europe to solar power would be for the creation of a *real world* asset. Pumping trillions of Euros into the European economy this would require, would also cause a genuine 'bull market' run with all the positive effects on employment and consequently on the reduction of state debt. It would also provide the so called periphery countries of Spain, Portugal, Italy and Greece (the sunshine belt) with massive inward investment to produce the growth they need to help them escape their present predicament.

Europe does not have America's problem of ideology when it comes to government instigated projects so there is no reason why Europe shouldn't take the lead in the developed world in this endeavour, as long as it decides to introduce State-directed Capitalism. Or, returns Free-market Capitalism back to its roots by

dispensing with the financial innovations (derivatives market) that have mutated its fundamental form. And, taking a leaf out of State-directed Capitalism's book by creating a European Development Bank controlled by the ECB. Such a course of action would create a 10-20 year real 'bull market' run that would eradicate European sovereign, company and individual debt.

When it comes to energy solar power has to be the way forward. A French scientist many years ago worked out that a 10 kilometre by 150 kilometre strip in the Sahara desert could supply the entire world's needs if all the light energy from the sun was collected and turned into electric energy. This should give the reader a 'yardstick' to judge the amount of energy that arrives from the sun. This will continue for millions of years. All we have to do is collect it.

## 2) Bioengineering and Biosphere Engineering

Greening the deserts by irrigation is a huge task requiring vast quantities of fresh water. However, using solar power collected from desert regions of high sunshine availability, like the Sahara, could produce vast amounts of energy to desalinate seawater for the deserts irrigation. Turning the deserts into productive regions, which would then be *real world* assets of the first magnitude as they would provide food to eat (alleviating the problems caused by overpopulation), wood to build and a thousand other biological products that would alleviate resource depletion, environmental degradation and produce biodiversity on the grand scale. Greened deserts would take out vast quantities of CO<sub>2</sub>.

Farming the Oceans to increase their productivity 100 fold is possible with not just the increase in food supply but with the same amount of increase in taking out CO<sub>2</sub> from the atmosphere.

Projects of this size would take well over 100 years to complete. They would be labour intensive. It would also create a global 'bull market' run for that length of time. This would, along with the introduction of State-directed Capitalism via 'Marshal Plans' into developing world countries, end poverty and bring about 21<sup>st</sup> century modernity to the entire planet. It is well known that the elimination of poverty reduces population growth, so that over time the major problem of overpopulation would simply fade away.

The secondary advantage, some would say the primary advantage, would be that these greened deserts and farmed oceans would absorb vast amounts of carbon dioxide, thus giving geo-engineering the most human friendly, as well as eco-friendly tool for controlling the world's climate.

The control mechanism for climate control needs 2 levers, one to take out greenhouse gases and the other to put them in (we already know how to do both of these). This is because once we have converted to solar power and are no longer pumping vast quantities of CO<sub>2</sub> into the atmosphere, and, the deserts are greened and the oceans farmed, we may well take out too much CO<sub>2</sub> and this could easily produce a new ice-age. These geo-engineering levers are essential for controlling

climate change and will mark the beginning of mankind's stewardship of the planet.

For countries like the UK where sunshine is not of a premium value but where other natural features may make massive investment in an energy project viable. The UK could easily tap into the endless power of the moon's gravitational pull on the Atlantic Ocean. When the moon is directly over the middle of the Atlantic Ocean, the gravitational pull raises the ocean's height by 2 metres. When gravity drags this 2 metre rise in the ocean into a 3-dimensionally restricted place - like the Severn Estuary - the effect is to raise the ocean's level by 20-30 metres. There are many ways to tap into this tidal rise and fall that happens twice a day and which is capable of providing endless energy. This is tapping into gravity power and as long as we have a moon - more than a billion years - this power, like solar power, is free. Printing money to produce a *real world* asset that would last for that length of time makes it viable financially and as we already have the technology it makes it scientifically viable. All we have to do is to tap into it.

### **Example 3 : Using printed money to provide 'Marshall Plans' for under developed polar regions in our Multi-polar Multi-cultural world.**

The recent Syrian immigration crisis in Europe, as I have pointed out in Appendix 3 : Bounded Rationality, can be easily resolved by using the immigrants to form a Free-Syrian Army and backing this million man army with European military technology and specialist personnel. Thus solving the Syrian crisis at the same time as the immigration crisis. This, however, would only work if there was a 'Marshall Plan' for Syria after the eradication of the Salifist medieval barbarians known as Islamic State.

Mario Draghi the Governor of the European Central Bank, can easily print money, say, for arguments sake, 1 trillion Euros, for a 'Marshall Plan' for Syria as this money is for the creation of *real world* assets; terms and conditions apply. As Europe is the benefactor it can insist on the money being spent on European technology and resources, thus creating an European economic boom and bringing Europe out of stagnation.

Another 5 trillion Euros, say, for a 'Marshall Plan' for the rest of the Middle-east and North African pole; terms and conditions, of course, will apply. It must be pointed out here that the Middle-east and North African polar region has the right to its cultural integrity even if that is medieval fundamentalism. However, this does not mean that the other polar regions will tolerate medieval barbarism as represented by Islamic State or other Salifist groups.

There is one condition that should be pointed up from the very beginning, and that is, that if they want a European 'Marshall Plan' for their polar region, then they will have to give up killing each other and try talking instead to solve their differences. The differences between Sunni and Shia and other branches of Islam are just that, differences inside of the same religion. If the mediaeval fundamentalists of the

Middle east did not hold to the negative aspects of Our Common Humanity - namely Might is Right - they wouldn't be suffering from the endless slaughter that they do today. How difficult can it be?

By extension, Mario can easily print another 20 trillion Euros or more for a 'Marshall Plan' for Africa and another 20 trillion Euros for a 'Marshall Plan' for South America. The same terms and conditions will apply. These 'Marshall Plans' would then fulfil the regionally based Multi-polar Multi-cultural world that is needed for a fully Comprehensive World Civilization which could then tackle the problems of the biosphere where co-operation between the polar regions is necessary.

Bringing to fruition these *real world* assets will transform not only the biosphere but also transform Homo Sapiens' societies allowing a Comprehensive World Civilization.

## Factor 7 -The Time Factor

Not only is this a another innovation for Bounded Rationality but it also presses the virtue of having a Time Factor for all human endeavours whether it is solving problems, like the European immigrant crisis, or, creating a Comprehensive World Civilization.

The time factor here in Factor 7, is how long do we have to construct a Comprehensive World Civilization? The answer is: as soon as possible.

Because.

Events last summer in the Arctic Circle where huge plums of methane gas - some a kilometre wide - are rising from the ocean floor where they have been frozen in the form of hydrates. With rising sea temperatures the hydrates return to their gaseous state.

Methane is a greenhouse gas 20 times more potent than carbon dioxide and with an estimated 100s of billions of tons locked in the Arctic permafrost - greater than the overall carbon locked in coal reserves - this is becoming a pressing problem. It should be stated here that methane eventually breaks down into carbon dioxide.

A feedback system has now started: The more methane released from hydrates the greater the rise in global temperature, the greater the temperature rise the more methane is released.

If this was not worrying enough recent work by researchers at Rice University who have been studying the Palaeocene-Eocene Thermal Maximum (PETM) 56 million years ago - a mass extinction event - have discovered that 2500 gigatonnes of carbon were released which resulted in a temperature rise of 6 degrees. As no soot or ash from volcanoes were found in the fossil records in the geologic layer for the period and no iridium layer that would denote an asteroid strike, it has been speculated that methane from a methyl hydrate source, caught in a positive feedback system as outlined above, could have been the major cause.

Now this may well be speculation at present but with the beginning of a methane positive feedback system now being witnessed in the Arctic it would be prudent to try and stop this as the consequences could eventually be catastrophic.

This means bringing the temperature down below the recently agreed 1.5% rise in global temperature to a negative quantity.

The only way to do this is to stop burning fossil fuels, and, begin farming the oceans and greening the deserts both of which will take out the carbon dioxide from the atmosphere, thus reducing the temperature of the planet. Methane from domesticated animals is also a problem but how much is not easy to estimate, although 20% of all green house gases has been suggested, however, I have found too many conflicting reports to make a rational assessment so I will leave this until conclusive research is available.

Artificial carbon capture and storage is now almost a necessity as an interim measure until the greened deserts and farmed oceans become the major CO<sub>2</sub> reduction levers. There have been many suggestions, we may have to try them all.

Time Factor 7 becomes very important if we want a Comprehensive World Civilization where we are able to control the climate by the leavers of putting in and taking out carbon dioxide (see Factor 6). We really do need to get a move on if we want control over the climate; greening the deserts and farming the oceans will take time.

I have had to risk being labelled a 'doom monger' - you know the type, the ones that go around with signs that read 'repent ye sinners, the end is nigh' - so I look to my readers to put flesh on the skeletal bones of my above précis on the subject of a methane feedback system by going onto the internet and reading the abundant literature and scientific data you will find there.

There is no defining scientific proof at present for a methane feedback system with catastrophic consequences. And we are only at the beginning as during the Arctic winter no methane is released because the Arctic still freezes over, re-freezing the tundra and the methyl hydrates on the ocean floor.

However, it would be a reckless man that ignored what evidence there is.

This time factor - Factor 7 in the Bounded Rationality of 'Civilization' - would more than suggest the immediate implementation of Factor 6.

Prudence is a virtue well known to all civilized people and a positive aspect of Our Common Humanity.

So I will risk being labelled a 'doom monger' when in fact all I am doing is being prudent about the possible catastrophic consequences of climate change.

Abandon hope all ye who ignore this warning - your time for dithering is up.

The Time Factor here is 0 or in words: as soon as possible

## Summary

This summary must be presented in 2 parts to reflect the MS material presented.

### Part 1 :

First, that great tool of rational thought - Bounded Rationality - where Factors define the boundary for the Bounded Rationality and is most expedient for bringing reason into human affairs. In this work I have added 3 innovations to Bounded Rationality. I have added a Governing Principle to each Factor as well as to the Bounded Rationality itself. And I have delineated between Proactive and Reactive Governing Principles. Reactive Governing Principles must take in all of the Factors that are being reasoned about. While Proactive Governing Principles only need those Factors needed to achieve the objective. And the third innovation, the Time Factor, that gives us the limits and/or the time line.

Second, the Bounded Rationality that I have constructed utilizing the innovations described above to achieve a Comprehensive World Civilization. This can best be seen in schematic diagram 1 where the 7 Factors are seen with their accompanying Governing Principles. These are:

- 1) Mankind's Relationship to his Fellow Man where the Governing Principle is the positive aspects of Our Common Humanity.
- 2) Mankind's Relationship to the Biosphere where the Governing Principle is the Evolutionary Process.
- 3) A Regionalized World which is Multi-polar and Multi-cultural where the Governing Principle is Co-operation. This new era we have entered has been brought about by the evolutionary process having entered Homo Sapiens' cultural world. Polar regions have their own cultural identity - cultural speciation.
- 4) The Ongoing Process of Understanding the Nature of Reality through science, consciousness, representation and belief where the Governing Principle is Research.
- 5) The Wisdom of Crowds where the Governing Principle is Education of citizens with Facts or with multi-sourced information.
- 6) The Practical Creation of *Real World* Assets to achieve a Comprehensive World Civilization where the Governing Principle is an Economic Operating System Fit for Purpose - World-directed Capitalism on the global scale, Region-directed Capitalism on the polar region level.
- 7) The Time Factor where the Governing Principle is of/or expediency of transition.



The Bounded Rationality of this MS, Civilization, has itself a Governing Principle which is Proactive and where the Proactive characteristics are: positive in attitude, dynamic in action and have a defined objective. For those familiar with Clausewitz they will recognize these characteristics are from his seminal work 'On Warfare'. And I chose them because being Proactive in the creation of a Comprehensive World Civilization is similar to a military campaign. Where the enemy is ignorance and its great ally sloth. They are, however, no match for our army of proactive rationality armed with the innovation enhanced weapon of Bounded Rationality.

This brings me to the author of this Bounded Rationality. Why did I choose these particular Factors? Why did I add 3 innovations to Bounded Rationality? Why did I relate being Proactive to that of a military campaign? Why indeed?

## Part 2 :

Let me present to you an explanation of the above questions in the form of a narrative:

It all started in 2007 when I was woken from my slumbers, with a terrible feeling of foreboding, from the European dream world of La Dolce Vita. I was just like the other 550 million other European citizens who were also inhabiting this world of 'earthly delights' oblivious to the sordid reality that surrounded us.

I was woken by the beginnings of the great financial crash of 2007/8 when a small provincial bank, Northern Rock, went bankrupt. I could not see what was happening or why. Small wonder as I had at that time no knowledge of banks, finance or economics. So strong was this feeling of foreboding that I deemed it time for me to get to grips with these important but boring subjects. 20 years earlier I had successfully completed a Masters degree an MA in Screenwriting & Screen Research. The Screen Research half of the course was meant to train me in the skills of research for documentary making. It was to these skills I was now to turn to get to grips with the financial crisis that was just beginning to unfold.

By the time I had completed the preliminary research - an important procedure when confronted with an unknown subject - I was fully aware that it was not a problem inside of this strange new world of finance but it was a problem with the financial world itself. And worse, the entire subject of economics was nothing more than a fiction (see Appendix 2 : Complexity and Economics).

This led me directly to the world of Free-market Capitalism, the operating system of the *real world* economy, as the only way to understand what was happening. This led to further research where I identified the banks move away from providing money for the creation of real world assets into the world of risk mitigation - the world of insurance. Hence my ability to detect the disastrous new world of the derivatives market. A cancer that has still not been removed.

It was also during my preliminary research that I realized that there was another economic operating system operating in the world economy - State-directed Capitalism. After identifying the disastrous nature of the derivatives market I then

turned my attention to this other form of Capitalism as it seemed to be having great success in raising people out of poverty - a billion people in less than 30 years. But finding out how it worked was not easy. So in 2011 I went to China to see for myself how successful it was and also to see if I could find someone to explain how and why it works so well. You have to see China today to really appreciate just how successful State-directed Capitalism is. It is simply amazing.

I could find no one to explain State-directed Capitalism nor why it is so successful in the short time I had in China. Problems with my visa meant I had to leave China early and decided as I had time to spare to visit friends in Chang Sen in northern Thailand. Sweet serendipity. It was in Chang Mai on my way through to the far north that I came across a Chinese economist on holiday with his wife and 2 children. He worked for a Chinese bank in Singapore and understood the entire economic operating system that is State-directed Capitalism. What you read in the section on State-directed Capitalism in Factor 6 is how it works and came straight from the Chinese economist's mouth. It was a funny conversation - the Chinese have a sense of humour similar to the British. At one point while explaining the accounting system he asked me if I thought that trucks full of strings of copper cash delivered the money from the People's Bank of China (China's central bank) to the other state owned banks (there are 29 such banks in China) to pay off the provincial governments' debt. You must remember that I was still a bit naive at the time about money as only a 'medium of exchange' with no intrinsic value of its own. The Chinese are fully aware of the great benefits this development in our understanding of what money is and how it can be used; hence, the Chinese economic miracle. Raising 1 billion people out of poverty in less than 30 years really looks like a miracle if you are viewing it from the perspective of Free-market Capitalism. However, it is not a miracle, it is just a far superior economic operating system that delivers *real world* assets with incredible efficiency.

The Chinese economist impressed upon me that this was not an option in Free-market Capitalism because banks in Free-market Capitalism are free to do what they like and are not controlled by governments - not a good idea in my humble opinion nor his. He also impressed upon me that there was a political dimension to this knowledge in that the Chinese government did not want to be seen to be pressing what could be seen as an ideological economic system on the rest of the world. This could easily result in a new 'cold war' which is not what the Chinese want. Nor is it what I want.

However, the success of this Chinese *real world* economic operating system is far too useful to be ignored. And by this time, as I was already formulating what it would take to produce a Comprehensive World Civilization, I could not ignore the success of this economic operating system. World-directed Capitalism is the result. With a World Bank 'printing' a world currency to achieve the creation of *real world* assets. Long time lines instead of short term profit, seen as normal. Control of this World Bank by the Polar Council (the replacement of the Security Council in the UN for our Multi-polar Multi-cultural world). This makes greening the deserts and

farming the oceans a rational proactive way of attaining the *real world* assets for a Comprehensive World Civilization.

Simple? Of course it is and that's because it is a proactive rationality. Indeed, it is the very First Rational Proactive Plan and Roadmap for a Comprehensive World Civilization. I have no doubt there will be many more, once it is realized how simple they are to produce.

And to round things off a reminder that you need to see Appendix 6 : The Bounded Rationality of State-directed Capitalism.

All that remains is to thank my sponsor - the evolutionary process that governs our biosphere, our cultural development and my brain. And yes, this piece of writing that has evolved over the last 10 years into what is presented here as Civilization.

I must also add that the goal can be stated in terms of the Proactive Custodial Role for Humankind in regard to the Biosphere.

\*

## Appendix

### Appendix 1: Our Common Humanity

This is an important concept and one that will come to play a major role in mankind's thinking this century as its veracity is, in the main, intuitively understood. A full understanding of Our Common Humanity will only come with a full understanding of Homo Sapiens' brains. Many label this academic subject as neuropsychology, however, I, amongst others, believe that Homo Sapiens' brains are biologic quantum computers and as quantum mechanics is only in its infancy I doubt a full scientific explanation of Our Common Humanity is coming any time soon. We are therefore left with a general approach to this important, one could say vital, subject.

It is here presented in its 4 main components.

First, the Biological Imperative:

All Homo Sapiens no matter what their race or colour can interbreed with the same degree of fertility success, revealing that we are indeed just one species. This means there is no external foundation for racism and where racism exists it exists only in the individual's mind.

Second, the Psychological Makeup:

1) We all have rationality, the ability to reason (see Appendix 3 : Bounded Rationality). as we are not the only animals to have rationality but we are the only species that can communicate rationality via the medium of a symbolic language both spoken and written. This makes up a powerful component of Our Common Humanity and has been formulated for use in human affairs in the concept of Bounded Rationality (see Appendix 3) where any subject can be reasoned by describing its boundaries and the factors that make its boundaries up. This is a very powerful tool in our ability to reason. (see Herbert Simon)

2) A set of emotions - love, hate, jealousy, envy, happiness, sadness, detachment, empathy, and many more - that we feel. The experiential experience of reality we all have as individuals is seen through these emotions either singularly or more often in combinations. The exception to this are psychopaths who would appear not to have these normal emotions or do not possess them in any great measure. There are variations in emotional strength to each emotion which is unique in each individual.

There are also emotions entwined in our shared traits; traits are distinguishing features in our Psychological Makeup and behaviour (see below).

3) Cultural expression. There has been much debate whether certain sets of emotions and traits give rise to specific cultures, or whether particular cultures emphasize certain emotions, or whether there is an interplay between both. Certainly children brought up in a particular culture tend to adopt that particular culture, however, adults often change their culture and often this is because another culture appeals to them either emotionally or rationally or both. Perhaps this is because individual human beings have different strengths in their individual emotions and traits. The best metaphor I have come up for this is light passing through a prism. White light passing through clear glass gives a complete spectrum. Coloured light passing through clear glass gives an emphasis to one part of the spectrum. White light passing through a coloured prism also produces an emphasis on one part of the spectrum. Light and glass, emotions/traits and culture. Choose which way around you want this analogy to be and perhaps you will discover something about yourself and/or the culture you come from.

4) Emotional responses to Cultural expression. A good example of this was a survey carried out across the world in regard to the atrocities carried out by Islamic State (IS). 98 plus % of the world's population were horrified by these acts such as pouring oil on living human beings and setting them on fire and decapitating live conscious people with knives. These medieval barbarians seem to lack Our Common Humanity. Thankfully they are a tiny minority much in the same way as psychopaths are. Or perhaps those that carry out these atrocities are psychopaths. It is reassuring to know that they are a tiny minority. As a result we can safely say that Our Common Humanity is in the general tolerant, that is, obeying the Golden Rule: Do unto others as you would have them do unto you. And that the general bias in our emotions is towards the positive aspects - we favour positive happy ones over negative unhappy ones. Which of course is part of the commonsense in Our Common Humanity.

5) Positive and Negative aspects of Our Common Humanity.

The positive aspects include kindness, altruism, tolerance, equality between the sexes and cooperation.

The negative aspects include cruelty, selfishness, greed, intolerance, misogyny and 'Might is Right' conflict.

6) Cultural Differences. The biggest differences between cultures are those that base their cultures on the positive aspects or on the negative aspects of Our Common Humanity. Thankfully most cultures are based on the positive aspects. Only the Salif branch of fundamental Islam manages to base its culture almost exclusively on the negative aspects of Our Common Humanity and we can see what a disaster that has brought to the Middle-east and North African polar region.

The differences between cultures should be something to celebrate especially when we know they reveal the full potential of Our Common Humanity.

Third, the Traits:

Homo Sapiens share various traits as part of Our Common Humanity. I list a few of the major ones below.

1) Creativity; much loved in all cultures. What is amazing is that even if you are from another culture you can still appreciate and be moved by the creativity of another culture. I myself have a love for Bharat Natayam - an Indian fusion of music and dance that I only discovered after visiting India. For a boy from the North-east of England and a teenager in the 60s, visiting India was the cultural equivalent of visiting another planet. Without the trait of creativity in Our Common Humanity I would not be able to appreciate this cultural expression nor experience the emotions stirred by this wonderful art form.

2) The Aesthetic trait; knowing what is beautiful. Beautiful Chinese actresses are as appealing to western men as they are to Chinese men. And of course vice versa. And also vice versa in regard to the attractiveness of western men to Chinese women. Aesthetics would appear to be built into our mental processes to a remarkable degree. The Chinese love western classic music but they also love music from all over the world; you only have to go 'line dancing' in Wushan Square, Hangzhou, where every type of music from all over the world is played for a thousand dancers who have built elements from regional dance forms into the various steps used in the 'line dancing' format. To go 'line dancing' in Wushan Square is, for me, a living definition of Our Common Humanity. The dancers put up with me joining in even though I was creating mayhem. Which brings me nicely onto tolerance.

3) Tolerance; it can be best defined in the saying 'do unto others as you would have them do unto you'. This is sometimes called 'The Golden Rule' and has featured in many cultures throughout history. This exists as a cultural trait as well as a psychological trait.

4) Fairness; as in the saying 'fair means or foul'. We know instinctively what this means but defining it precisely is difficult. Children often say 'it's not fair' when confronted by their

parents' dictates; they seem to know what is fair even from an early age. To be fair is considered to be a good quality by all human beings. It is a positive aspect as it makes us happy and is a defining trait in Our Common Humanity.

Fourth, the Sexual Imperative.

It is both biological and emotional. It produces the strongest most intense experiential experience (orgasm) even if it only lasts a short while. It is also the foundation stone of Our Common Humanity because it places us squarely in the evolutionary process of the biosphere. Life and Death. The phenotype must die so the next generation can evolve and this is achieved via sex.

\*

This quick visit to what makes up Our Common Humanity should be obvious to most human beings. Where Rationality, Emotions, Traits, Positive and Negative Aspects and Cultures are the Factors that define its Bounded Rationality when we reason about what it is..

If that is not enough then think of these 4 things:

- a) The Beautiful Game. Yes, that's right, football. 2 1/2 billion people worldwide watched the last World Cup. Why, we must ask ourselves, is football so appealing to human beings? Is it the aesthetics of complexity in human movement and coordination, in cooperation inside a strategy which leads to tactical superiority? It certainly is beautiful to watch and difficult to analyse because each player is in some sense unique. It allows for the mass euphoria of religious experience and is often referred to as a religion. It can be seen as tribal and a substitute for war but 'it's more important than that'. The mystery of Our Common Humanity is buried deep in football; we all know what it is even though we can't express it in words.
- 2) The unbearable cuteness of children. Any child from any race, it really doesn't matter.
- 3) The power of tickle. You can't tickle yourself but you can tickle every other human being on the planet.
- 4) And of course Humour. The best of which is when we can laugh at ourselves.
- 5) Physical responses to emotional states like smiles and laughter and weeping and moaning and the gnashing of teeth.

To Summarize

If we Homo Sapiens have differences they are only cultural and cultures are an expression of aspects of Our Common Humanity that have evolved within groups of individuals in a region over time. Cultural evolution is a living trait amongst all cultures throughout the world today and something to celebrate.

This concept of Our Common Humanity has been with us since the beginning of civilization, so I will leave you with the Chinese philosopher Mencius who observed some 2300 years ago: 'There is a common taste for flavour in our mouths, a common sense for sound in our ears and a common sense for beauty in our eyes. Can it be that in our minds alone we are not alike? What is it that we have in common in our minds? It is the sense of principle and righteousness - moral principles\*. Moral principles please our minds as beef and mutton and pork please our mouths.'

\* Perhaps today we would say fairness

## **Appendix 2: Complexity, Economics and Capitalism.**

It has been noted over the last century by a number of scientists from various disciplines that economics is not a pure subject, in the sense that physics or chemistry are pure. Hence its reputation as the 'miserable science'. Indeed, just a cursory enquiry reveals that it contains elements of self-organisation, social organization, psychology, geography, geologic commodities, engineering, technology, business management, industrial organization, money as a medium of exchange, investment, ownership, property rights, law, culture and many more related subjects. As a result, economics is a nexus - a bonded multi-dimensional subject.

That all of these elements that make up economics are intertwined, each one affecting the other, and in the whole, reveals the complexity driven nature of the subject. As such economics - the academic subject studied in Universities throughout the world- should not be confused with either economics as a nexus or the *real world* economy but as an academic fiction disguised to look like a genuine academic subject worthy of study.

However, the *real world* economy is a prime candidate for study in regard to understanding the principles of complexity. The problem is that it is so complex that not even those universities that have departments devoted to complexity - Santa Fe, M. I. T. and the University of Warwick, to name but a few - are willing to study the subject.

The *real world* economy, therefore, is beyond scientific understanding in any meaningful way at present. This leaves the field open to all people who can use their common sense. (see Appendix 1 : Our Common Humanity) and Rationality (see Appendix 3 : Bounded Rationality)

Certainly no one should be frightened of the subject, nor should they allow those who claim to be experts in the subject to hide behind technical jargon when in fact there are no theories, nor a theoretical framework, to pin their technical jargon onto. There has been too much use of 'smoke and mirrors' in this subject. The 'smoke' of technical jargon and the distorted 'mirrors' of mathematical models.

Politicians, our democratic representatives, are baffled by the subject and have turned to the 'experts' for advice, only these 'experts' - bankers and financial service managers - are charlatans. Only too willing to provide advice that only benefits them. It is also the same people who regulate the financial service industry, and, that also run it, and, exactly the same people who are the 'experts' that advise politicians and run rating agencies. These self-styled 'experts' haven't a clue about the *real world* economy, for the simple reason: no one can - it's far too complex. That is why these self styled experts hide behind their 'smoke and mirrors'.

The 'mirrors' of mathematical models delude our politicians by convincing them that mathematical models reflect the *real world* exactly when in fact mathematical models are metaphors - they describe how things are, more or less. The only trouble is that the 'more or less' just happens to be very important when it comes to the *real world*. Small perpetrations in dynamic systems can quickly become large ones - this has been described in chaos theory (another important subject in the new science of complexity) as the butterfly effect. Therefore the mathematical models/metaphors used to describe the *real world* economy have limited use and carry within them the seeds of their own dysfunction. Multiply this by the number of mathematical models/metaphors that describe different parts of the *real world* economy, and that have no relationship to each other, and it is easily recognized why this approach to understanding the *real world* economy is a complete nonsense.

As Emanuel Derman pointed out 'theories, as distinct from models, attempt to discover the principles driving the natural world. Models only tell you what something is more or less like, but their necessary simplifications ignore some dimensions of the world... In economics there are no true theories; one can only make models... The Efficient Market Model that has gone so badly awry compares stock prices to smoke diffusing through a room, and models them using the physics of diffusion. But these are flawed analogies (metaphors), and are neither theory nor fact.'

When it comes to politicians, however, ignorance of what theories and models are, sit alongside their ignorance of the new science of complexity. In their case ignorance would definitely appear to be bliss, and much to the detriment of the citizens they represent. Those that benefit from the ignorance of our politicians



are the 'vested interests'. These 'vested interests' are those that benefit from the present economic system - bankers, financiers, rating agencies and lawyers.

If economics, or as it should be rightly named, the economic nexus, is beyond man's knowledge at the present time, we are fortunate that there is an alternative way of understanding the *real world* economy. The economic system we know as Capitalism is the operating system of the *real world* economy and by studying Capitalism (both Free-market and State-directed), which are easily understood by the use of common sense and Bounded Rationality, it is possible to at least grasp how the *real world* economy works, much in the same manner that one might grasp the idea of an aeroplane from watching a bird fly.

What is so revealing about this approach is that we quickly find that the *real world* economy, like its operating system, Capitalism, is a manmade construct. As such, we know that we can construct whatever economic system that suits our purpose. Our purpose in this MS, Civilization, and ultimately its creation in the *real world*, is to produce a *real world* economy that benefits both Homo Sapiens and the rest of the biosphere.

This ability to construct whatever operating system we want is an unexpected freedom. It will be particularly useful for creating the *real world* assets needed to produce a Comprehensive World Civilization, which must be the ultimate goal for Homo Sapiens this century.

## **Appendix 3 : Bounded Rationality.**

### **PART 1**

**THE DEFINITION:** In the *real world* Homo Sapiens don't take all factors into consideration when reasoning. When we reason we rationalize whatever the subject is into Factors. It is the Factors that define our ability to rationalize the subject. To have a fully comprehensive rational for any subject it would have to Factor in all associated facts in a comprehensive ranking under a 'cardinal utility function' (a way of attributing importance).

Instead, when Homo Sapiens rationalize, we tend to use the Factors that are of interest to us, or, what has gone before. What Factors are chosen become the boundaries of our rationality; hence, Bounded Rationality. Despite its limitations Bounded Rationality is still a wonderful tool for helping us to reason about the world. (see Herbert Simon)

### **PART 2**

**THE INNOVATIONS:** This writer has introduced 3 innovations to Bounded Rationality.

i) I have introduced a Governing Principle for every Factor. A means of placing the Factor in the required perspective and context.

ii) I delineate the difference between what is reactive and what is proactive in a Bounded Rationality: in a reactive Bounded Rationality the number of Factors are enormous while in a proactive Bounded Rationality the only Factors needed are those that are required to achieve the ends required. One can easily say that the Bounded Rationality of any subject has itself a Governing Principle in this context. One that is proactive.

iii) I introduce a Time Factor. This gives the time frame for the Bounded Rationality and even a time line, where appropriate. As we live in a world of dynamic transition knowing the time frame is important.

### **An Example of the Use of Bounded Rationality with these 3 Innovations.**

Let me take as an example the recent and ongoing immigration crisis in Europe. The bureaucrats and the politicians that run the European Union are just reacting to the crisis, they are being reactive; hence, the reason they are running around like a load of chickens with their heads cut off. The sheer number of Factors they are having to deal with are enormous. And what is more, each Factor has an emotional component as well as a rational 'cardinal utility function' that is unique to each individual involved in trying to solve the problem. The bureaucrats and our politicians have only one answer to this confusing complexity and that is to turn to their default setting, it is called: 'muddling on through'. So don't expect a rational solution anytime soon to the immigrant crisis.

However, if they were proactive (Innovation ii) they could assemble a set of Factors to achieve the set goal of eliminating these uninvited immigrants into Europe. Yes, the German Chancellor did invite them into Germany but as Germany is just a part of the EU she, Angela Merkel, had no right to do so without consulting and achieving a consensus with her European partners to do so. This just shows to the degree that Europe is still a region of Nation States (see Appendix 7: Brexit, The Wisdom of Crowds and the European Union of Nation States, for a reasoned explanation).

And no, I'm not proposing the return of the death camps, even though that is 'a' solution; it is a solution that goes against the positive aspects of Our Common Humanity (see Appendix 1: Our Common Humanity).

The Proactive Bounded Rationality for eliminating these uninvited immigrants from Syria is produced below:

The war in Syria is the root cause - this is just commonsense. So ending the war is obviously part of the reasoned solution. Where, everyone asks, are we going to get the 'boots on the grounds' from to win the war against the medieval barbarians of Islamic State (IS)? Thanks to Angela Merkle and the 'Law of Unintended Consequences' we now have a million young Syrian men in Europe that could, relatively easily, be trained and equipped and made into the Free Syrian Army. Then sent back to Syria to defeat the medieval barbarians of IS and other Salifist groups such as Al Nusra and Al Queda.

But why would they go back to a destroyed country and face the possibility of death, when they can just stay in Europe and live La Dolce Vita. What they need to understand is what happened in Germany in the 1920-30s. Because the German people didn't face up to their demons and fight the Nazis the entire world was thrown into war with over 100 million people slaughtered; the Germans have redeemed themselves since then and are now the very best of Europeans. The Syrian immigrants need to return to Syria and destroy their country's demons that's if they want what we have here in Europe - they must fight for it just as the civilized world did during the Second World War.

What, however, will be needed is a proactive plan to make it worthwhile for these uninvited immigrants to return home. A 'Marshall Plan' for the reconstruction of Syria is the answer. But where does Europe get the money for such a plan? The answer to that is Mario Draghi, Head of the European Central Bank (ECB) - Super Mario as he is known in Europe since he printed a trillion Euros to face down the money markets and won (see Factor 6 in the main body of this work where it explains how it is possible to print money for all manner of things when money is only a 'medium of exchange' and has no intrinsic value of its own; which is what money is today). Consequently there is nothing to stop him printing another trillion Euros, or more, to fund a 'Marshall Plan' for Syria. (see Factor 6 where it is revealed that one of the things you can print money for is the creation of *real world* assets; which is exactly what 'Marshall Plans' are designed to do)

This would come with terms and conditions, part of which would be that all the money loaned to Syria would be spent on European technology, equipment and resources, thus providing a massive boost to the economies of the European Union; ending stagnation and reducing unemployment. This is what happened with the original 'Marshall Plan' after the Second World War.

So what would be the Factors in the Bounded Rationality for ending the immigrant crisis.

For a start the Bounded Rationality would be proactive (Governing Principle), thus limiting the factors to just 5.

Factor 1) The creation of the Free Syrian Army where the Governing Principle is training and equipping by the armies of Europe.

Factor 2) The support of Syrian women and children until the Salifist medieval barbarians are defeated and they can return home where the Governing Principle is the positive aspects of 'Our Common Humanity'.

Factor 3) The reconstruction of Syria via a 'Marshall Plan' where the Governing Principle is the European Union's economic operating system that has the ability to print money to create *real world* assets (see Factor 6 in the main body of this work).

Factor 4) The UN recognized legitimate government of Syria and its ally Russia as the entry point for the Free Syrian Army where the Governing Principle is strategy and tactics. [It should be stated here that America's mistake in dismantling the bureaucracy of Iraq after the second Iraq war must not be repeated in Syria, as it was this mistake that has led directly and indirectly to the rise of IS. It is now known that the leadership of IS has many of the old Iraqi bureaucracy's leadership as well as leading members of the old Iraqi army.] Destroying a country's bureaucratic system leads to chaos and anarchy with Iraq being an excellent example. More people died in Iraq as a consequence of dismantling the bureaucracy after the war than during the war itself. As for Assad, he is easily replaced and he and his family can look forward to a nice retirement in northern Russia.

Factor 5) The Time Factor where the Governing Principle is expediency.

Let us look at the time line in this Time Factor.

First, let us appraise what has happened so far in regard to our political leaders knee-jerk reaction to the immigrant crisis? They have agreed to take in all Syrian refugees through this agreement with Turkey - not everyone is aware that this is what is implied in this agreement. That could be up to 6.5 million Muslims of different factions varying from modern post-Islam scientifically enlightened, through the Salifist spectrum from lip serving to Jihadist, to the medieval barbarians of IS, and all of them eventually arriving in Europe.

The time line here runs from 2 years ago with zero immigrants to the present day with 1.5 million and the future with 5 million arriving over the next few years. The country is so destroyed that even when the fighting stops few will wish to stay.

I hate to point out the obvious but the effect of 1.5 million arrivals has already caused massive problems that haven't even begun to be solved. Another 5 million will cause problems well beyond our political leaders ability to solve. And, this may well be an under estimation of how many Syrian immigrants that will eventually arrive. And, if they are successful in gaining access then we should expect more not just from the Middle-east and

North African polar region but from all over Africa as well. And that could run into the tens of millions.

Of course this will never happen. The citizens of Europe will not tolerate it. The rise of nationalism and right wing political parties to the degree they have already reached with just 1.5 million immigrants, will increase in direct proportion to the extra 5 million plus from the Middle-east and North African polar region, that will arrive in the coming years and the tens of millions from Africa that will arrive in the next 10 years.

The time line here reveals just the beginning of a crisis that needs to be brought to an abrupt end.

Second, I have listened to Ban Ki Moon the leader of the UN over the last 2 years criticize the EU for not taking in more refugees. If he was to follow the rules of the UN in regard to refugees then the Syrian refugees that arrive in Turkey should be registered there and eventually be absorbed into Turkish society.

[It has to be said here that until the Turkish people decide which polar region they want to be in then Turkey must be considered a part of the problem and not as a part of the solution. Nothing would give this writer greater satisfaction than to see the Turkish people vote to become a post religious (Islamic) scientifically enlightened culture. They could then join the European Union and become part of the solution. But until then they must remain part of the problem and must be considered a part of the Middle-east and North African polar region.]

Why is the UN ignoring their own rules on this matter of refugees arriving in Turkey? No one seems to know including our own political leaders. So at present this situation continues unopposed and looks set to continue into the future.

This is another example why, in this new Multi-polar Multi-cultural era we have entered, the UN needs a complete overhaul to reflect the changed world we now live in (see Factor 3).

The time line here in the immigrant crisis reveals that the transition to a Multi-polar Multi-cultural era that we are already in needs to be reflected in the world's institutions.

A rational proactive plan and roadmap - something Europe's political establishment have not got but which has been outlined here - is the solution to the immigrant crisis. There is no longer any use in denying its full implementation.

The Time Factor here is 0 or in words: as soon as possible.

This example of a Bounded Rationality with the innovations of Proactive rather than Reactive orientation, and, Governing Principles for the Factors, and, a Time Factor for implementation, shows just how useful these innovations are.

## **Appendix 4: Leverage – The real magic of capitalism.**

There are many types of leverage, let me give you an example of one form of leverage - 'accounting leverage':

A bank is capitalized by stockholder's equity of say 20 billion Euros. It holds assets as security on the loans it has made to the value of 800 billion Euros. The bank's leverage in this case would be the asset value divided by the capital value of stockholder equity, or, 800 billion Euros divided by 20 billion Euros, which is 40. This theoretical bank would be considered to be highly leveraged as it holds 40 times its capital base in assets. The magic of leverage in this example is when banks create money on the back of the assets they hold to loan to customers. Yes, the banks create the money.

Let me give you an example of how loans to customers works: A man wants to build a house. He has a business plan that states that the total cost will be the cost of the land plus the cost of the materials plus the cost of the labour to build it. The bank agrees with the man that his business plan is viable and so loans him the money to build the house, taking the house as security until the man pays back the loan. The money the bank loans the man is created by the bank for this very purpose - it did not exist before.

The end of the Second World War saw a situation where the American currency - the almighty 'greenback' - was accepted by everyone in the world as the only real currency that had real value. This was a real game changer, in that, for the first time people throughout the world believed in paper money - the almighty 'greenback'.

It was rumoured, but has never been verified, that America printed 3 times the net value of the USA to loan out to the countries of the world. These loans - in US dollars - were for the creation of *real world* assets such as infrastructure and housing. If it is true, then it is the first time that this fundamental form of leverage was used. It would also explain how the 'great depression' was brought to an end by the Second World War.

It also reveals how much belief - a psychological factor - plays in economics. Because when people were willing to believe in the US dollar, which after all is just paper money, then it was possible to create *real world* assets with paper money - printed money.

It would also explain why the old head of the Federal Reserve Bank of America - Ben Bernanke - considered to be the foremost expert on the 'Great Depression', was able to provide the world with the economic tool known as Quantitative Easing (QE). Ben, who had access to the records of the Federal Reserve, must have realized that printing money - where money is only a 'medium of exchange' (see below) - could be used to create *real world* assets. But because of the economic system he was operating in - Free-market Capitalism - he was forced to deliver the

money to Free-market banks. Unfortunately, Free-market banks are free to invest the created money where they like. There is no direction, no co-ordinated strategy and no control over this bounty of *real world* wealth creation presented by QE.

It must be remembered that it was Richard 'Tricky Dickey' Nixon, who, in 1971, took the US dollar off the gold standard. Thus making money only a 'medium of exchange' - money with no intrinsic value because it was not related to gold or any other metal for that matter. Nixon liberated *real world* wealth creation from the constraints of money with intrinsic value.

However, the *real power* of this fundamental form of leverage can only be realised by state-directed Capitalism where both direction and co-ordination can be applied. This is the tool by which the Chinese built the Pearl River Delta Conurbation. Thirty years ago the Chinese didn't have 2 Yuen to rub together. So where did they get the money from to create what is the equivalent of Japan (they both have a population of 135 million people) on the Pearl River Delta? There can only be one answer, and that is, the application of this fundamental form of leverage via State-directed Capitalism.

The potential power that all banks possess - the ability to create money to lend out as credit for the creation of *real world* assets - is the very foundation stone of Capitalism. And yet it can only be realised in its full potential by State-directed Capitalism.

In the present world, free-market banks demand more security than the asset when it is eventually constructed. However, bearing in mind what was said in the main body of this MS about proof of viability, there is no reason why with proof of both engineering viability and proof of financial viability that the house - in the example above - would need any more security than the asset when completed. Printing the money for the man to build his house becomes a simple accounting exercise in the above example, because the printed money is attached to the value of the *real world* asset of the house - albeit, when it is completed.

The core concept to grasp is the power of banks in Capitalism. This can be defined in a more technical way, as the ability to create *real world* assets by the provision of leverage via the store of value held in banks in the 'medium of exchange'. Then by the use of the 'index of value' that a 'medium of exchange' possesses in a market, to store the money value of the *real world* asset thus created, in terms of the 'medium of exchange' for the purpose of accountancy.

This leads to two fundamental tenets:

- 1) It is the acceptance that *real world* assets are the only things of real worth in the world.

And

2) That money, as a 'medium of exchange', is an abstraction, and without any intrinsic *real world* value of its own, and as such, it is just a useful tool.

A tool that has 2 uses:

First, as an 'index of value'. Where the market place decides the value of *real world* assets in an 'index of value'.

Second, as a 'store of value'. The value of *real world* assets can be stored in banks as a 'store of value' for accountancy purposes. Thus the printed money is equal to or less than the created *real world* asset and as such does not disturb the equilibrium of the accounts of either the banks or the customer, or, the state accounts if the state has been involved as a customer. This type of leverage can be used on projects that are far too big to be financed by Free-market banks.

It is this fundamental form of leverage that Chinese State-directed capitalism has used to such stunning effect in the creation of the national transport infrastructure, the Pearl River Delta Conurbation, the reconstruction of all of their cities and their social housing programme.

The power of this fundamental form of leverage in a State-directed Capitalist system cannot be underestimated or over stated - the potential is limitless.

And the power of this fundamental form of leverage in a World-directed Capitalist system means you can print as much money as you need to create *real world* assets as long as the *real world assets* are worth more than the sum total of their 'store of value' over time. Thus greening the deserts and farming the oceans become viable over long time lines - a greened desert would be worth more than the trillions that it would cost to create over a 1000 year period. And a greened desert could easily last for 10s of thousands of years or even 100s of thousands of years.

Long time lines are a feature of State-directed and World-directed Capitalism but not of Free-market Capitalism where short term profit is the only goal. Thus we can see that leverage is time dependant and depends on the characteristics of which economic operating system is used.

## **Appendix 5: The Tenets of State-directed Capitalism.**

Tenets are considered to be basic principles of whatever the subject is, say, of a religion or a political dogma. Or, they could be considered to be Factors in a Bounded Rationality; in this case, State-directed Capitalism.



The first tenet/Factor to grasp is that contemporary State-directed Capitalism is the 'printed' money based economic operating system by which the *real world* assets of civilisation are created, and that these assets are the only thing of real value in the world because they are of *real world* value to human beings. This is the fundamental link between money and the *real world*.

The second tenet/Factor to grasp is that contemporary Capitalism (both State-directed and Free-market Capitalism) works by using money only as a 'medium of exchange' - Where money has no intrinsic value of its own. This was not always the case in Capitalism's history but it is today and with huge benefits. Because money has no intrinsic value the only things of value are *real world* assets.

The third tenet/Factor to grasp is that money has only 2 other uses besides that of a 'medium of exchange' as stated above in Appendix 4 : Leverage - The Real Magic of Capitalism. And these are:

One, as an 'index of value'. Every *real world* asset, from houses to hospitals, and from food to foot ware, is accorded a value in an 'index of value', that is dictated by the market - what people are willing to pay in terms of the 'medium of exchange'. Or by governments when the *real world* assets are so large that no markets exist for them.

Two, as a 'store of value'. Money as a 'medium of exchange' can be stored under your mattress as paper money, or in banks as electronic money. This is a convenient utilization, which citizens of contemporary civilization take for granted. Once a *real world* asset has been accorded its value in the 'medium of exchange' via the 'index of value', this can then be stored as electronic money for accountancy purposes by banks, financial institutions, companies, governments and individuals.

The fourth tenet/Factor to grasp is that banks have been accorded a special place in contemporary Capitalism (in both State-directed and Free-market Capitalism), in that, their primary function is to provide credit to individuals and companies for the creation of *real world* assets. Banks achieve this by creating money for this specific purpose - this is called leverage (see Appendix 4: Leverage - The Real Magic of Capitalism) or more accurately as 'fundamental leverage'. Banks, however, can only provide credit/money for the creation of *real world* assets if these assets have both scientific/engineering/construction viability, and, financial viability, where the asset that has been produced has a value that is the same or more than what it cost to build. In other words, if it is scientifically proven that they can be made, and, that the value of the asset when it is made in terms of the 'index of value', is worth the same or more than what it cost to build, then it is possible for banks to create as much money as required to build it. This uses '2 X +' accounting where X is the cost to create *real world* assets. This form of accounting is used to 'balance the books' in State-directed Capitalist banks and government institutions.

With only these few tenets/Factors derived from the precedence set by contemporary State-directed Capitalism and by using our common sense in line with these tenets/Factors, it is possible for anyone to understand the *real world* economy by the economic operating system of State-directed Capitalism. It is important to remember, there is no theoretical framework for this, but we know it works because China has successfully used it to raise 1 billion of its people out of poverty and create the first 21st century civilization. This is the only validity needed

And if you don't believe me, go to China and see it for yourself. Then keep pinching yourself to remind you that it was all done with printed money.

## **Appendix 6 : The Bounded Rationality of State-directed Capitalism.**

Construct this yourself as a means of measuring your understanding of both Bounded Rationality and State-directed Capitalism. First Class Honours await all those that succeed.

## **Appendix 7 : Brexit, the Wisdom of Crowds and the European Union of Nation States.**

### **The Problem**

What has become clear in just the last few months is that Europe is not a polar region of uniform cultural significance in the way I treated it in Factor 3. I saw Europe as a post-Christian scientifically enlightened polar region that was well on its way to being fully integrated. The rise of right wing nationalist parties I saw as the last remnants of an era fading fast under the onslaught of cultural evolution. But with Brexit everything has changed.

In Factor 5 I state that The Wisdom of Crowds is never wrong. It never is. The Wisdom of Crowds in the Brexit referendum was in the form of the democratic process. A genuine form of the Wisdom of Crowds. It would, therefore, be a foolish man who did not take notice of what the British people have revealed by their application of the Wisdom of Crowds.

It could be easily said, if one were looking for causal reasons why the British people voted the way they did, that the British government did not deal with the massive influx of immigrants by building more schools, hospitals and houses to

accommodate them, and this is true, or that the European Union did not assist Britain in this regard, which is also true. But there is something much more fundamental here.

The British are a very tolerant people but this massive influx of immigrants over a short period of time has made the British people feel they are becoming strangers in their 'own land'. They felt they were losing their cultural identity and had no control over this process. It's as basic as that. There are other factors like the willingness of these immigrants to undercut the existing indigenous population when it comes to bid for work, thus reducing the value of labour for everyone. Competition in any free-market society happens all the time. What makes the difference is that the cheap labour is identifiable culturally. Polish builders undercutting British builders is a good example.

The cultural difference between European countries is very small in regard to the difference between Europe and the cultures of other polar regions and yet it was enough for British citizens to demand a halt to the dilution of British culture and the process by which this was being achieved; the lack of control by the Nation State of the UK to control its borders. Make no mistake Brexit is a problem of cultural identity and cultural differences.

If it is true for Britain it is almost certainly true for the rest of Europe. How many countries in Europe would dare to give their people a choice in the control of immigration. Most European citizens don't mind some immigration. It is just that they like to be able to control how many and where they are from. In this regard there is no difference between the citizens of Europe's Nation States and that includes the UK.

The European Union has evolved from being a free-trade area but has been taken in a federal direction; towards a United States of Europe on the American model. And this direction has been set by the European Union's civil service.

The Commission, I think we all forget, is just that, it is the European Union's civil service - it runs the European Union on a daily basis. However, it already seems to be more than that, it seems to be a political entity. A political entity with its own agenda: a federal Europe.

Progress towards a federal Europe has stalled because what has been implemented in that direction is obviously not working. Take the Syrian immigrant crisis. Germany, as a Nation State, invited these Syrian people into Europe without any consultation with the rest of Europe; Germany obviously thinks of itself more as a Nation State than a federal state of the EU. As these Syrians arrived, Europe quickly reverted back to the Nation State to control the immigration. Europe has not acted collectively on this matter as a federal EU would. Europe is still very much a polar region of Nation States as the immigrant crisis has revealed.

And in terms of European economies the federal 'one shoe fits all sizes' has been a disaster. Only Germany has benefited from having the Euro as an undervalued currency as compared to what the German Mark would be if it still existed. While

for Greece, Italy, Spain, Portugal, France and most of the other European countries in the Euro zone it has been a disaster as they are all suffering from having the Euro as an overvalued currency compared to what their old currencies were. This has led to huge unemployment on top of growth that hardly registers as such. And yet these countries don't want to abandon the Euro let alone abandon the European Union.

Indeed, none of us do.

So how do we square the circle?

By both having our cake and eating it as well.

## The Solution

It is time for Europe to take its place fully as a polar region. As outlined in Factor 3 the world has already entered into a Multi-polar Multi-cultural era. The confusion and chaos we are surrounded by is the boundary condition between the 2 eras. The old Uni-polar Uni-cultural era that was never fully realized because it defied the reality of our evolving Multi-cultural world is being replaced by a new era that reflects that reality.

Unfortunately, having already entered into the Multi-polar Multi-cultural era, Europe is still attached to the American establishment's Uni-polar view of the world where America is the only superpower, the world's policeman and guiding light. This nonsense has got to end.

It's not as if America is any longer a role model for the rest of the world. America has 3 major issues it has not resolved inside of its own borders: first, the level of poverty (15%) in the richest country in the world is obscene, second, racism is getting worse and not better, and third, the violence is now completely out of hand; 650,000 Americans have been killed by their fellow Americans since the year 2000; the same kind of numbers for a major war. It's as if America is at war with its self. On top of this the American political system has been hijacked by corporations rendering it a corrupt version of democracy and consequently a corruption of the Wisdom of Crowds. Money from individual corporations is donated to both sides, both Republican and Democrats and that leaves both beholden to the corporations. The solution to this terrible state of affairs is quite simple, take money out of American democracy altogether.

Perhaps the election of Donald Trump marks a new beginning. He wants to make America great again and I genuinely wish him success in this. A strong and powerful North American polar region would be a great asset to the Multi-polar Multi-cultural era we have entered. Whether a far right Republican agenda will achieve this is unknown, stranger things have happened and who knows it just might resolve America's problems along the way. The far right of the Republican Party has never had a go at running America so this is its chance to prove its worth. And if

the American citizens don't like it they only have to wait 4 years and they can vote it out. America after all is a truly democratic polar region.

So I wish the American people well on this great adventure which they are about to embark.

With America concentrating on its polar region it's time for Europe to concentrate on its own polar region and the organization that represents it, the EU.

Let me introduce you to the organizational structure of the present European Union. The vast majority of European citizens don't know about the organizational structure or the main components of the European Union but it is time they did.

There are 7 principal decision making bodies:

- 1) The European Council - It defines the overall priorities, direction and political decisions. It comprises the Heads of the 28 member States. Plus the President of the Council of the European Union and the President of the European Commission.
- 2) The Council of the European Union - Represents the Executive Governments of Member States and is responsible for Legislature along with the European Parliament.
- 3) The European Parliament - Members directly elected by EU citizens of member states. Responsible for Legislature along with the Council of the European Union.
- 4) The European Commission - The executive body of the EU. The EU's Civil Service. Responsible for the day to day running and business of the European Union as a whole unitary body. It does not represent the member states.
- 5) The Court of Justice of the European Union - The Institution that encompasses the whole Judiciary. Oversees the uniform application and interpretation of European Union Law.
- 6) The European Central Bank - Administers monetary policy. It is owned by the Central Banks of all 28 member states. It is setup like a corporation as it has shareholders (member states Central Banks) and stock capital.
- 7) The European Court of Auditors - Designed to audit the finances of the European Union and investigate corruption and malpractice. The European Union's internal watchdog.

It should be obvious from this organizational structure why the European Union is a bureaucratic nightmare. It evolved into this over time; it was not rationally constructed. If it had been a new species entering into an existing environment it would not have survived the evolutionary rigor of 'survival of the fittest'. Instead, it entered into a new environment of its own creation where there is no competition, no alternative.

Those of us who wanted to change the EU from within were sidelined by the bureaucrats entrenched in the organizational structure, who, like typical bureaucrats, wanted only to protect their own jobs at the expense of the greater

good. Leading this bureaucratic army was the ultimate bureaucratic component of the EU, its civil service, the European Commission.

But this civil service has evolved into something far worse than just a bureaucratic nightmare, it has taken on a political dimension with its own agenda. The European Commission's agenda is to foist a uniform culture on all of Europe but this is doomed to failure.

As I say in Factor 3 'people love their own culture as much as their own language'. The Commission thinks that European economies are not culturally influenced but this is also a great nonsense. The north European work-ethic cultures are totally different from the more relaxed siesta loving la dolce vita south. And don't we all love the difference. 'Viva la difference' as the French would say. These cultural differences are real and should be cherished. 28 countries, 28 cultures, most of them with their own language. Our polar region should reflect this in its organization.

In the past, before the Euro, European Nation States with their own currencies had the ability to devalue or revalue against the US dollar to reflect the economic strength or frailty of individual states.

It is now possible in this Multi-polar Multi-cultural era for a European Union of Nation States (EUNS) in our very own polar region to devalue or revalue against the Euro.

It is a simple innovation to have one currency (the Euro) for the European polar region while keeping the multitude of currencies for our Nation States. This really is having your cake and eating it as well. And it fits perfectly into this new Multi-polar Multi-cultural era.

## **The European Union of Nation States**

A European Union of Nation States (EUNS) would start off with a few givens;; it would be democratic of the representative kind, the same kind as all 28 member states practice today; it would respect the Rule of Law; it would respect the cultures of all its members, respecting their borders; and it would retain a free trade zone for the member states

EUNS means a return to national currencies that can be devalued or re-valued against the Euro, the reserve currency for the European Union of Nation States as a polar region. This is an innovation born out of the Multi-polar Multi-cultural era we have already entered.

Then there is the organizational structure of the EUNS. Where the principal decision making bodies would be as follows.

1) A Council of Ministers, one from every country (replacing The Council of the European Union (2)), meeting every day to discuss European issues.

2) A Council of Prime Ministers (replacing the European Council (1)) meeting every month to make decisions on our polar region and have them enshrined in Law.

3) A EUNS Central Bank (replacing the old ECB (6)) with extended powers and responsibilities.

i) To administer monetary policy and print money (Euros) for the EUNS polar region.\*

ii) To administer the economic operating system of State-directed Capitalism. To be more precise EUNS-directed Capitalism.\*

iii) To administer the EUNS Development Bank for projects and 'Marshal Plans'.\*

\* The European Union of Nation States would have a Capitalist operating system in the same mould as State-directed Capitalism as outlined in Factor 6. Where the banks are owned and controlled by European citizens through their democratic institutions. The EUNS Central Bank that would be independent and would have the added power to print money for the creation of *real world* assets using the 2X+ accounting system (see 'The Best Kept Secret' in Factor 6).

4) A Censor's Office (replacing The European Court of Auditors (7) and the Court of Justice (5)) to carry out audits on EUNS projects and investigate corruption and malpractice in the EUNS. With full Judiciary powers to enforce the decisions made by the Council of Prime Ministers. The Censor's Office would be the EUNS watchdog and enforcer, and most importantly guardian of the Rule of Law.

As you can see there is no need for a European Parliament (3). This would only be important if Europe was to become a United States of Europe which it never will.

Nor is there any necessity for a European Commission (4). Again this would only be important if Europe was to become a United States of Europe and it needed a federal civil service.

'Marshall Plans' for other polar regions like Africa and South America would transform the world faster than any other means. Terms and conditions would apply. It would also be possible to have a 'Marshall Plan' for the Middle-east and North African polar region if it were willing to give up its Salifist beliefs and learn to talk through their problems instead of applying the 'might is right' solution.

The political and economic system for the EUNS I have suggested are simple and efficient and consequently robust, strong and effective. And, where there is no need for anything else.

When it comes to making decisions in the Council of Prime Ministers as all of the Nation States have different sized population there is a polemic for making voting rights population sensitive - the 'Citizens' Perspective. However, there is another polemic, as each Nation State is a singular cultural entity and as such should have the same rights no matter what the size of the population - the 'Cultural' Perspective.

These twin perspectives need not be a problem, indeed, they could be an asset in the same manner as binocular vision is to human sight. A 'weighting' system for every subject could be debated and decided on before the subject is voted on.

This simple innovation would have the benefit of visiting the subject from the twin perspectives before the subject is voted on. A 'weighting' system for every subject would provide the relationship between the 'Citizens' and 'Cultural' perspectives on every subject; a unique balancing act that would only enhance our Multi-cultural polar region. Over time any mistakes in the correct 'weighting' on any subject would become obvious and easily rectified.

Because our European culture is so imbued with democracy and representative democracy at that, having a representative democratic Council of Prime Ministers making decisions, makes it politically sound for the citizens of the European polar region. It allows all citizens of Europe to accept decisions taken on their behalf even when they may not agree with whatever decision has been made. You either believe in representative democracy for our polar region or you don't. For decisions that fall outside of representative democracy's remit then referenda would be valid.

### Summary

For those of us that lived through the entire brexit campaign it will always remain a defining moment in our lives. Each of us will have particular memories and insights, here are two of mine.

1) Previous immigrants before the recent surge in European immigrants, those from the Indian sub-continent, from Africa and those from the West Indies, were interviewed for TV. They were mostly for brexit. Because, they said, they were worried that these European immigrants were diluting British culture. What a strange thing British culture truly is. These previous immigrants had already absorbed enough British culture to assume, correctly, that they were already British and within just a couple of generations.

2) Many of the northern mainly white working class were for brexit primarily because they saw it as a way of giving the political class in the Westminster bubble a 'damn good kicking'. The same has just happened in America where the American people have just voted in the anti-establishment candidate Donald Trump as President. They have felt let down and abandoned by all political parties for decades and this was their chance for revenge. I think something similar is happening all over the world. Our politicians live in a fictional bubble of their own construction devoid of any worthwhile contact with the real world that their citizens live in.

Any analysis of these insights in terms of the Wisdom of Crowds is doomed to failure because the Wisdom of Crowds is holistic by its very nature. What I have come to realize is that the wrong question was asked in the brexit referendum.

What should have been asked is:



Do you want to remain in the present EU with its federalist agenda?

Or

Do you want to join a European Union of Nation States similar to the one outlined above?

The Wisdom of Crowds would then have delivered a decisive vote for a European Union of Nation States and I should imagine by a massive majority; 90% plus.

Surely it is now time to ask all of the citizens of Europe through their Nation States this question. If Europe really does believe in democracy then there's no choice in the matter and the politicians should step aside and let the Wisdom of Crowds work its magic.

Implementation of EUNS would be relatively easy. Once the old EU is disbanded which it could be at a stroke then the leaders of all 28 Nation States would have to spend a few months together to sort out the basics starting with the Givens. As 'everything' would be sorted out by the representative democratic process then 'everything' could be easily changed if it proved unsuccessful.

One element of the EUNS polar region that would have to be tackled is the internet. The Americans control the internet and don't want to let go and that's because they built a backdoor into its operating system so they could spy on everyone who uses it. This backdoor has been found by hackers who have used it for the same reason the Americans use it for but more than this they have created the 'Dark Web' where every nefarious act is carried out with impunity. The EUNS needs to build its own internet for the polar region which is totally secure and free from backdoors so that citizens, companies and governments have total privacy. A European computer company that produces computers that are totally secure like Apple's fully encrypted computers would also be a good idea and which could provide fully meshed internet access to develop the internet to its full potential; think of the virtual reality universe where every European citizen has their own avatar.

What more can I say? EUNS would be a polar region that would be efficient, responsive and adaptive making it the ideal role model for other polar regions that are made up of Nation States like Africa and South America and possibly the ASEAN polar region.

There is little left to say except to reveal how individual Homo Sapiens think of themselves culturally in this new era. How do you think of yourself?

To give you a clue, here's how I think of myself culturally: I'm Chaucerian English - 'The Writer's Tale', I'm European and proud of our unified cultural diversity, I'm a citizen of the world creating The First Rational Proactive Plan and Roadmap for a Comprehensive World Civilization.

In our Multi-polar Multi-cultural world all Homo Sapiens have these 3 cultural identities: country, polar region and world citizen, united by the positive aspects of Our Common Humanity.

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