

- THE ZEITGEIST MOVEMENT -
OBSERVATIONS AND RESPONSES
Activist Orientation Guide

PREFACE:

The Zeitgeist Movement is the activist arm of *The Venus Project*, which constitutes the life long work of industrial designer and social engineer, Jacque Fresco. Jacque currently lives in Venus, Florida, working closely with his associate, Roxanne Meadows. Now, let it be understood that Mr. Fresco will be the first to tell you that his perspectives and developments are not entirely his own, but rather uniquely derived from the evolution of scientific inquiry which has persevered since the dawn of antiquity. Simply put, what The Venus Project represents and what The Zeitgeist Movement hence condones, could be summarized as: ‘The application of *The Scientific Method* for social concern.’

Through the humane application of Science and Technology to *social design* and *decision-making*, we have the means to transform our tribalistic, scarcity driven, corruption filled environment into something exceedingly more organized, balanced, humane, sustainable and productive. To do so, we have to understand who we are, where we are, what we have, what we want, and how we are going to obtain our goals. Given the current state of affairs, many of which will be addressed in the first part of this book, the reader should find that we not only *need* to move in another direction...*we have to*. The current economic system is falling apart at an accelerating rate, with the prospect of worldwide unemployment occurring on the largest scale ever seen. Simultaneously, we are courting the “point of no return” in regard to the destruction of the environment.

Our current methods of social conduct have proven to have no chance in resolving the problems of environmental destruction, human conflict, poverty, corruption and any other issue that reduces the possibility of collective human sustainability on our planet. It is time we grow up as a species and really examine what the true problems and solutions are, as uncomfortable, untraditional and foreign as they might seem.

This work will first present the current economic problems we face, recognizing root causes, consequences and inevitabilities, while then presenting solutions derived from an assessment of what is actually *relevant* to life and society. Additionally, information will be provided as to how each one of us can help in this challenge, presenting methods of communication and activism that will hopefully speed up the process of transformation.

It is very important that those who begin this work pause for a moment and think about the windows of perspective they have been indoctrinated into. Considering the current vastness of human values and ideologies, coupled with the identification that grows over time with associations to a particular train of thought, tradition or notion of reality, it can be difficult and even painful for a person to revise or remove the cherished understandings which they have considered true for long

periods of time. This 'ego' association, coupled with the perpetual state of 'limited knowledge' each one of us has, will be the biggest hurdle many will face when reading the information presented here. It is time to broaden our loyalties and affiliations beyond the narrow confines of the marketplace, tradition, and the nation-state to encompass the human species as a whole, along with the planetary environment that supports us all. It is time we view the earth as an indivisible organic whole, a living entity composed of countless forms of life, all brought together in a single community.

If nature has taught us only one thing, it is that the only constant is *change*. There is no such thing as a *Utopia*. Therefore, in order for us to grow productively as a species, we need to become experts at "changing our minds" about anything and everything. If you choose to approach this material with a conscious attempt at being open minded and objective, we feel the ideas expressed here will realign your vision of the world, yourself, and the future of our human family in a way that is the most productive, humane and effective.

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- Part 1: Monetary Economics -

Chapter 1:

Mechanisms & Consequences

Defining our terms:

The term “Economics” is generally defined as ‘the social science that studies the production, distribution, and consumption of goods and services’ ¹.

As of the early 21st century the prevailing mechanism of virtually all economies worldwide is some form of “Monetary System”. A Monetary System uses an intermediary exchange medium, known as ‘money’, as the means for facilitating employment, production, distribution, and the consumption of goods and services. The use of this medium of monetary exchange, as a basis for an economic system, could be termed: “Monetary Economics”.

While virtually no nation on the planet currently uses anything else but Monetary Economic Theory in its country’s operations, certain variations are indeed present. Generally speaking, these variations have to do with the degree by which the system is controlled by the government of a country. The current ‘sliding scale’, moving from more regulation to less regulation, typically starts with “Communism”[♦] (maximum state control), passes through Socialism (partial state control), and ends at Capitalism (little to no state control). These variations of economic application could be termed “Social Systems”.

The prevailing Social System of the world today is Capitalism. Capitalism, which is often placed under the umbrella of another theoretical concept known as the “Free Market”, is defined as: “an economic system by which the means of production are owned by private persons, operated for profit, and where investments, distribution, income, production and pricing of goods and services are predominantly determined through the operation of a ‘free market’ ².”

A “Free market” is essentially an unregulated trading orientation where “the prices of goods and services are arranged completely by the mutual consent of sellers and buyers; hence, the market forces of supply and demand determine prices and allocate available supplies, without government

¹ wordnet.princeton.edu/perl/webwn

[♦] Communism is being referenced here in its historically applied form, not the idealized forms which advocate no money.

² en.wikipedia.org/wiki/Capitalism

intervention”³. The notion of “Free market” has many interpretations and schools of thought. For example, one of the more extreme, yet currently active ideologies is the “Austrian School”, which condones the notion of “*laissez-faire*” which basically means having literally no state intervention on economic issues at all. In this perspective, “welfare” and other state sponsored ‘social’ programs would be considered inappropriate ♦.

Now, general terminology aside, a very relevant attribute of Monetary Economics is the “Theory of Value”. The level of a product or service’s ‘value’ is derived essentially from two factors ^:

- 1)The *scarcity* (availability) of the materials used.
- 2)The amount of *human labor* required to produce a product/service.

For instance:

Imagine the amount of time and effort it would take to create a simple shirt before the advent of electricity and advanced industrial technology. The overall process might be to: prepare the soil -- plant the cotton seed -- oversee the growth period -- pick the cotton -- tease out the seed --- spin the cotton into thread -- weave it into the cloth -- and shape the cloth into shirt form.

Given the above scenario, simply from a human labor standpoint, the value of that shirt would be relatively high and likely sold for a price respective of the extensive labor. The cotton seed (component material) value would be negligible as it is produced as a byproduct of the prior harvest, making its *scarcity* value very low. Therefore, the real value of this shirt comes from the labor involved.

Now, hypothetically speaking, what if this production process required no human labor at all, while the cotton seed/water/sunlight/soil maintained its natural abundance? What would the value of that shirt be then? Obviously, it really wouldn’t have a value at all.

As of the start of the 21st century, Industrial Machines have taken the role of planting and harvesting

³ en.wikipedia.org/wiki/Free_market

♦ The evolution, application and interpretation of Economics are staggeringly large bodies of material with endless debate. It is not in the interest of this manual to present a treatise on the whole of Economics. In fact, a partial basis of this manual is to show how, through the advent of Technology and the elimination of Scarcity, 99% of all economic theory is now an outdated and irrelevant practice.

^ There are also even more subjective forms of value that are demographic specific, where certain “brands” create prices (projected value) not based on tangible human labor or material value, but on the “status identity” of the item itself, as perceived by the consumer culture. This is a less relevant form of “economic value” and will be discussed more so in the section entitled: “Distortion of Values” later in the Chapter. Also, financial instrument values, such as issues traded on the stock market are also irrelevant, in and of themselves, when it comes to actual production and distribution.

agricultural products to the effect where one lone farmer can now work 1000+ acres of land on his/her own. The advent of textile equipment, such as the Cotton Gin dramatically reduced human effort, while with the modern use of industrial computerization, we are seeing a constant gravitation to the near full automation of the Agricultural and Textile Industries, among many others. The point is that the position of “Economic Value”, as a seemingly static economic notion, is now being overhauled by this technological influence (increasing ease of production/material abundance), which could, theoretically, eliminate the notion of ‘value’ entirely.

When human labor is reduced/displaced by technology and automation, the assumed ‘value’, which is to equate that ‘labor’ to ‘price’, drops respectively. The ‘value’ of the output would then move to the creation/maintenance of the machinery, which now serves as the role of laborers. Consequently, the more efficient, durable and sustainable these worker machines are, the further the ‘Value’ of the production drops.

The realization is that the pattern of machine automation, coupled with modern innovations that are finding substitutions for “scarce” resources, could lead us into a position where no good or service would require a “value” or price tag. It simply wouldn’t make any theoretical sense. For most, this is a very difficult thing to consider, due to what we are used to experiencing in our everyday lives. Regardless of your opinion, the fact is, the pattern of constant technological improvement coupled with automated machinery can theoretically create an economic environment where the abundance of materials and production mediums are so high and efficient, most humans will have little need to ‘purchase’ anything, let alone ‘work for a living’, in the traditional sense. More specifically, even if machines slowly displaced only a large minority of people, expanding unemployment, the ramifications would be systemic, and the entire economic system would grow more and more unstable and inoperable. This issue will be expanded upon in Chapters 2 and 5. That point aside for now, let’s examine some empirical mechanisms that Monetary Economics, specifically in the context of Capitalism, requires in order to maintain the integrity of the system. In the remaining sections of this chapter, we will discuss the 5 most foundational attributes needed for maintaining the system, the reasoning behind them, and their consequences.

Mechanism One

The Need for Cyclical Consumption

The roles of people in a monetary system are basically broken into three distinctions:

The Employee, The Consumer, The Employer (or Owner/Producer) ♦

♦ There is also the Investor who gives fiscal support to an Employer/Owner/Producer, or trades in the Financial markets for gain. This isn’t relevant to the context for an investor is not required to exist in order for the market system to operate.

The Employee performs tasks for the Employer in exchange for a “Wage” or monetary payment, while the employer sells a good or service to the Consumer for a “Profit”- another classification of monetary payment.

In turn, both the Employer and Employee function as Consumers, for the monetary payments (“wages” and “profits”) they obtain are used to purchase goods and services relevant to their survival. The act of purchasing goods and services, which is the role of the Consumer, is what allows the Employer to make its “Profit”, while also enabling the payment of the Employee’s “Wage”.

In other words, it is the requirement of perpetual ‘Consumption’ that keeps the Employer in business and maintains the Employee’s job.

Now, it is important to understand that this payment-consumption cycle (or ‘cyclical consumption’) cannot stop, or the entire economic structure would collapse, for money would not come to the Employer, the Employer would not be able to afford to pay his Employee, and both the Employer and Employee would not be able to perpetuate the cycle by being a Consumer.

Consequence:

#1 - Nothing physically produced can ever maintain an operational lifespan longer than what can be endured in order to maintain economic integrity through ‘cyclical consumption’.

In other words, every ‘good’ produced must breakdown in a respective amount of time in order to continue financial circulation to support the players (consumer/employee/employer) in the game. This characteristic could be defined as: “Planned Obsolescence”.

Planned Obsolescence can generally take two positions:

- a) Intentional: Deliberate withholding of efficiency so the product in question breaks down.
- b) Consequential: Profit based shortcuts taken in production, usually in the form of cheap materials/poor design, in an effort to save money and create repeat customers. This translates into an inferior product immediately.

[i.e. = The use of plastics for electronic enclosures is cheaper for the company and the consumer, but the durability of this material is poor in comparison to say, titanium metal, which is much more expensive.]

#2- The introduction of new products and services must be constant to offset any increased efficiency of the prior generations of production, regardless of functional utility, generating endless *waste*.

In other words, waste is a deliberate byproduct of industry's need to keep 'cyclical consumption' going. This means that the replaced/obsolete product is expelled, often to landfills, polluting the environment. The constant multiplicity accelerates the pollution.

'The Need for Cyclical Consumption', which could be considered the 'engine' that powers the entire economic system, is inherently dangerous and corrupt, for the nature of the necessity does not allow for environmentally sustainable practices to be maximized. The constant re-creation of inferior products wastes available resources and pollutes the environment.

To express this from a different angle, imagine the economic ramifications of production methods that strategically maximized the efficiency and sustainability of every creation, using the best-known materials and techniques available at that time. Imagine a car that was so well designed, it didn't need maintenance for 100 years. Imagine a house that was built from fireproof materials where all appliances, electrical operations, plumbing and the like were made from the most impermeable, highest integrity resources available on earth. In such a *saner* world, where we actually created things to *last*, inherently minimizing pollution/waste due to the lack of multiplicity and maximization of efficiency, *a monetary system would be impossible*, for 'consumption cyclically' would slow tremendously, forever weakening so called "economic growth".

Mechanism Two

The Abundance of Scarcity

In Monetary Economics, the notion of "Supply and Demand" is a well-known construct, simply denoting that 'the more there is of something, the less it is worth in respect to itself'. For example, drinking water was historically a very abundant resource, which didn't typically require payment for its consumption in a commercial sense. However, as pollution of the water table and city water systems have developed, filtered drinking water is now being commercially sold, often at a higher price than oil per gallon. In other words, it is profitable for resources to be scarce. If a company can convince the public that their product is "rare", the more they can charge for that product. This provides a strong motivation to keep their items scarce. On yet another level, it should be pointed out that the central banks of nearly all countries also *create scarcity* within the money supply itself in order to keep pressure on the market system. Bernard Lietaer, designer of the EU currency system points out:

"Greed and Competition are not the result of immutable human temperament...greed and fear of scarcity are in fact being continuously created and amplified as a direct result of the kind of money we are using...We can produce more than enough food to feed everybody...but there is clearly not enough money to pay for it all. The scarcity is in our

national currencies. In fact, the job of the central banks is to create and maintain that currency scarcity. The direct consequence is that we have to fight with each other in order to survive.”⁴

The ramifications of this *abundance of scarcity* are nothing but detrimental. If profit can be made as a result of scarcity generated by environmental pollution, then this creates a sick reinforcement of indifference to environmental concern. If companies know they can make more money by having their resources or products remain scarce, how can a world of abundance ever occur? It can't, for the corporation will be motivated to *create* the scarcity if need be. In turn, the scarcity created in the money supply itself by the central banks compounds the motivation for us to compete with each other, generating an ethic-less, primitive tribalism with everyone out for themselves, producing human stress, conflict and illness.

Mechanism Three **The Priority of Profit**

A monetary system's foremost motivating principle is Profit [♦], or the acquisition of money through the exploitation of others. All players in the game must, in order to survive, seek out a strategy to acquire income. A “wage” earner seeks out the best possible pay he can get for his services, while the Employer (owner/producer) seeks to constantly reduce costs in order to maximize profit. This is the dominant “mentality” in a Monetary System and those who are in positions of great wealth (material “success”) are often the most ruthless. While many people who favor the profit system will talk endlessly about their “ethical” standards in regard to their practices, history has shown that the priority of profit is actually a sickness which is not only poisoning our personal/social well-being and standards of living, but also the environment on which we rely for virtually everything we need as a species.

However, before we begin with the negative consequences resulting from this ‘mentality’, let us consider what many think to be the good side of this profit priority – “Incentive”.

As the theory goes, the need for profit provides a person/organization with motivation to work on new ideas/products that would sell in the market place. In other words, the assumption is that if people were not motivated by their need to survive through profit, little social progress would be achieved.

⁴ Lietaer, Bernard “*Beyond Greed and Scarcity*”. *Yes Magazine* 1997

[♦] For the sake of simplicity, the term ‘profit’ is going to be used here as synonymous with ‘income’ and ‘wage’. While the classical economic classifications separate these notions, these terms simply refer to the acquisition of money. The wage earner ‘profits’ from his work, for it is just income, very simply.

First of all, the most powerful contributions to society did not come from corporations seeking profit. Nikola Tesla did not establish alternating current electric power because he was out to make a buck. Louis Pasteur, Charles Darwin, the Wright Brothers, Albert Einstein and Isaac Newton did not make their massive contributions to society because of material self-interest. While it is true that useful inventions and methods do come from the motivation for personal gain, the *intent* behind those creations typically have nothing to do with human or social concerns, for detached self-interest and survival are really the true motivations.

Profit interest almost always comes before human concern, and a simple glance at the cancer causing preservatives in our foods, the planned obsolescence of nearly everything manufactured, along with a health care industry that charges \$300 for a single antibiotic pill, will indicate that 'Profit Based Incentive' is actually detrimental, for the true incentive is not to contribute to society in a meaningful way, but merely to exact wealth from it in any way possible. Profit is actually a *false* incentive. Problems in our monetary based society will only have a resolution if *profit can be made* from solving those problems.

Consequence:

The psychological/sociological ramifications resulting from the priority of profit are of grave proportions when it comes to the conduct of human beings. In fact, an entire structure of imposed control has been created in order to deal with the never-ending problems associated with the need for survival by way of gain/profit/income - The Legal System. While non-monetary related crimes, often born from ego, jealousy, emotional deprivation and other psychological issues are currently a problem, the frequency of non-monetary related crimes are nothing in comparison to the crimes committed that are motivated by the acquisition of money and property. In fact, if we define "Crime" as 'Corruption' and define "Corruption" as "Moral Perversion; Dishonesty", then an entirely new perspective comes into play, for, if you look closely enough, you will see that nearly every act of strategic monetary gain is corrupt by its very construct...it is just accepted as 'normal' by the conditioned culture to whatever degree is deemed tolerable by consensus.

For example, when you go to the grocery store and buy a box of cereal, 9/10 times the amount of cereal occupies only 60% of the space within the box. This 'advertising strategy' as the producing company would call it, is actually just a blatant, wasteful lie. The advertising agencies, with all of their tactics of social manipulation, are likely one of the most corrupt institutions on the planet. Sadly, we have been conditioned to call it 'promotion' or 'strategy' instead. More on the social distortion created by advertising will be presented in the "Distortion of Values" section of this chapter.

Now, to put the spectrum of monetary derived corruption into a workable perspective, we will divide this aberrant behavior into 3 classifications: General Crime – Corporate Crime – Government Crime.

General crime, as derived from the pursuit of money, ranges from petty theft to illegal sales to fraud to violent robbery. This byproduct of the monetary system is often not given the thought needed to understand its source, for many tend to dismiss these “criminals” as some kind of social anomaly, rather than relating their basis to the need to survive. The inherent *stress* and other side effects associated with deprivation are also overlooked.

The ‘Merva-Fowles’ study, done at the University of Utah in the 1990s, found powerful connections between unemployment and crime. They based their research on 30 major metropolitan areas with a total population of over 80 million.

Their findings found that a 1% rise in unemployment resulted in:

a 6.7% increase in Homicides;

a 3.4 % increase in violent crimes;

a 2.4 % increase in property crime.

During the period from 1990 to 1992, this translated into:

1459 additional Homicides;

62,607 additional violent crimes;

223,500 additional property crimes.⁵

If you were to take a well-to-do, ethical, ‘stand-up’ person, strip them of their wealth and resources and drop them into a poor city with nothing but the shirt on their back, there is a very high probability that this person will begin to lie, cheat and steal in order to survive.

It is no surprise that the poorest neighborhoods in the United States maintain the highest crime rates. A person born into a deprived environment, with little resources, poor education and few opportunities for work will do what they need to do in order to live. The point here is that economic depravity (scarcity), not so called genetic “criminal tendencies”, creates this kind of aberrant behavior.

Corporate Crime, which is almost always exclusively profit related, takes many forms: Planned Obsolescence; Market Manipulation; Outsourcing; Price Fixing; Monopolistic Collusion; Labor Exploitation and Governmental Collusion are just a few to note. From Enron’s deliberate shutting down of California’s Power Plants to boost its Energy stocks⁶, to the Bayer Corporation’s knowing distribution of HIV tainted drugs⁷, it should be clear to most people that corporate crime is constant and often times more insidious than “General Crime”, for the repercussions tend to affect very large

⁵ Merva & Fowles, *Effects of Diminished Economic Opportunities on Social Stress*, Economic Policy Institute, 1992

⁶ <http://www.nytimes.com/2005/02/04/national/04energy.html>

⁷ http://www.naturalnews.com/News_000647_Bayer_vaccines_HIV.html

groups of people.

The “Corporate Criminal’s” need to secure a business’s profitability is no different in basis than the “General Criminal’s” need to survive. While the latter typically commits crimes to live, the former commits crimes to further secure their positions of power, lifestyle and wealth. It is based on fear. The notion of “Greed”, which manifests from a perpetual insecurity derived from the fear of losing what one has, serves as the motivating factor for most corporate crimes. It is like a gambling addiction. The more you get, the more you want. This neurosis is perpetuated/reinforced by the social stratification that the monetary system creates, for there is a never-ending progression of “luxuries” available as one’s purchasing power increases (i.e.: mansions, yachts, limos, diamonds, land, etc). More on this will be addressed in the next section: “The Distortion of Values”.

Government Crime is one of the more complex and difficult forms of conduct to consider, for perception of government is highly modified by the prevailing values this “ruling class” perpetuates through society, via the mass media and traditional jingoism. In other words, if we look back at the horrors of Hitler, many often forget that many of the German people also maintained the anti-Semitic value system, propagated by the regime through pamphlets and broadcasts. The same can be said for the US Invasion of Iraq, which was fueled initially by public support, simply because of the hate and fear of so called “Islamic terrorists”, generated by the attacks of September 11th 2001. That being said, let’s put aside our traditionalized values of loyalty and “patriotism” and take an objective look at what government within a Monetary System actually is and represents.

First of all, all members of government must be paid a wage and all projects they devise must have funding. This money apparently comes from “Taxes” imposed on the public, or loans from banks or other governments. Taxes are generated through ‘commerce’ or ‘income from commerce’, while loans must be paid back with money manifested in some way either through more commerce, more loans, or more taxes, theoretically.

The central role of government is the invention of regulatory legislation to handle the functioning of society. Idealistically, the broad interests of the public would be the first priority of government. Unfortunately, as history has shown, this is not, and has rarely been, the case. Rather, government as we know it is actually a ‘parent’ corporation to all the other corporations working within the country’s economy. This, of course, makes sense for the value of any nation is really determined by the state of its economy. This means the government has a “Vested Interest” in the economic state of its nation, most specifically an interest in those within its own class - the rich upper class.

“Vested interest” or a person or group having something to gain or lose by a governmental decision is a two way street. A politician can gain monetary ‘contributions’ from a company he favors in his

rulings, while the company thus gains from the rulings made in favor of itself. Lobbying and Contributions in America constitute Billions of dollars a year and this money is given entirely under the pretense of putting the donating parties “agenda in action”.

While the examples of government and corporate collusion are vast, ranging from the passing of untested pharmaceuticals by the FDA, to the oil lobby’s success in reverting the California Zero Emissions Law which forced the clean running ‘electric’ cars into reclusion, the greatest monetarily derived crime of government is its use of War for the benefit of it corporate/financial constituents.

In the words of Two-Time Congressional Medal of Honor Recipient, Major General Smedley D. Butler:

“War is a racket. It always has been. It is possibly the oldest, easily the most profitable, surely the most vicious. It is the only one international in scope. It is the only one in which the profits are reckoned in dollars and the losses in lives. A racket is best described, I believe, as something that is not what it seems to the majority of the people. Only a small “inside” group knows what it is about. It is conducted for the benefit of the very few, at the expense of the very many. Out of war a few people make huge fortunes...

In the World War [I] a mere handful garnered the profits of the conflict. At least 21,000 new millionaires and billionaires were made in the United States during the World War... The Sixty-Fifth Congress, reporting on corporate earnings and government revenues. Considering the profits of 122 meat packers, 153 cotton manufacturers, 299 garment makers, 49 steel plants, and 340 coal producers during the war. Profits under 25 per cent were exceptional. For instance, the coal companies made between 100 per cent and 7,856 per cent on their capital stock during the war. The Chicago packers doubled and tripled their earnings.

And let us not forget the bankers who financed the Great War. If anyone had the cream of the profits, it was the bankers. Being partnerships, rather than incorporated organizations, they do not have to report to stockholders. And their profits were as secret as they were immense. How the bankers made their millions and their billions I do not know, because those little secrets never become public – even before a Senate investigatory body.”⁸

World War II, The Korean War, Vietnam and now Iraq and Afghanistan are no different. Accelerated industrial creation, military contracts, reconstruction contracts, energy/resource acquisition (theft), high interest austerity driven World Bank and private bank loans for post war economies, and even drug trafficking by the CIA⁹, are just a few of the highly profitable mediums.

The motivation for war is three fold. 1) Industrial Profit, maximized for the elite 2) Resource Acquisition (theft) 3) Geopolitical Alignment to increase the ease of further industrial profit and resource theft.

⁸ Butler, Smedley D., *War is a Racket*, Feral House, 1935, Chapter 1

⁹ Webb, Gary, *Dark Alliance*, Seven Story Press, 1999

This is one of the greatest sicknesses caused by the need for wealth and power. Government, with its team of brainwashed assassins on hand, is involved in the ultimate form of self-preservation, and as long as all the resources of the world remain 'hoarded' for the interest of a few, this pattern of War will never end.

Now, the above classifications of "corruption" are only a generalized grouping. Vast nuances of human behavior in everyday life are also very much poisoned by this mechanism for profit; dishonesty, ranging from the 'art of negotiation' where two business people compete with each other for their own self-interest, with an inherent disregard for the other, to the disharmony built into the employer-employee relationship, where one wants to maximize labor to reduce hourly wages paid, while the other seeks to maximize time spent in order to gain more income.

The bottom line is that The Priority of Profit sets up an 'us against them' duality mentality, for, within the monetary system, there has to be a buyer-seller; a worker-employer; a client-owner; a have-have not. Given this reality, each party is forced to enable conditions that are most profitable for them, therefore strategic edges are always sought and thus a constant battle is always raging. We are constantly at war with each other in order to live. This battle creates little over time in the way of sustainable human progress, and the sick, polluted, distorted world you see around you is the result. |

Mechanism Four

The Distortion of Values

Our Beliefs and Values are shaped by culture. While there is a genetic basis to certain human attributes and behaviors, the knowledge we have and the way we think about and act upon that knowledge is fundamentally an environmental phenomenon.

With that in mind, the monetary system requires a form of communication to inform the public of what a company has made available for sale. This form of communication is termed 'advertising'. The characteristic of advertising is 'promotion' and promotion is a manner of communication, which, generally speaking, creates a bias in favor of the product in question. In other words, advertising's job is to entice...or in more direct terms – manipulate the consumer into purchasing a product. This manipulation takes many forms, but one of the most effective is the manipulation and/or exploitation of the viewing audience's "values" - what he or she finds important.

However, before we go any further, it needs to be pointed out that the mass consumption patterns currently seen in the United States and elsewhere were not always the case. America originally was founded, to some degree, on a kind of Protestant work ethic, where thrift and savings were dominant values. However, by the early 20th century, a concerted effort by the business community set out to

distort these notions and mold a new army of impulsive, perpetually dissatisfied, status conscious consumers. Advertising agencies switched their arguments from utilitarian ones to those gauged for emotional appeal and status. Consequently, today the average American consumes twice as much as he or she did since the end of WWII.¹⁰

Now, one of the most powerful forms of ‘value manipulation’ comes from re-associating a person’s identity to a particular ideal. Patriotism and Religion are classical examples of this, for through indoctrination at an early age, a person is often conditioned to feel a close personal connection to a country or religion, hence conditioning that person to want to support the doctrines, unconditionally.

Another example of this is the concept of “fashion”. Fashion takes many forms, from the clothes people wear to even the ideologies they perpetuate. To illustrate how successful the commercial industry has become in manipulating the values of human beings for their own gain, many people today can be seen walking around wearing certain commercial articles, merely for the purpose of expressing a company’s brand, contriving some kind of apparent social status or “stylistic expression” from them. Signature “Tommy Hilfiger” shirts, trade marked “Prada Bags” and flashy Rolex watches are examples of products where the utility or function of an item has lost total relevance, with importance now derived by what the item “represents”.

Sadly, what these people often do not realize is that they are nothing more than walking advertisements for the respective company, plain and simple.

The “status” or “expression” really exists entirely in the conditioned ‘value projections’ of that person, and if enough people become manipulated in the same way, a “trend” emerges, which further reinforces the delusion by way of collective identification. These trends can become so powerful, that those who do not adhere to the fad, might be deemed “outcasts” and be ostracized.

Now, ‘Vanity’ aside, we must also examine the distorted values created in the form of mentalities and worldviews. This constant need of self-interest often spreads like a cancer into other psychological areas, creating and reinforcing such neurosis as “Greed”, “Jealousy” and “Ego”.

Greed is likely the driving force of the monetary system’s perpetuation, beyond just survival. Due to the inherent stratification of goods and services (and hence standards of living) available to those with more and more purchasing power, the human being is groomed to perpetually want “more” material wealth, for the “more” seems to go to infinity. The result is a culture which doesn’t have a concept of balance, or a sense of what is actually important, or “enough”. Advertising compounds

¹⁰ Schor, Juliet, *The Overworked American*, New York Books, 1991, p. 208

this by its constant depictions of “the possibilities”, often making people question their own self worth because they do not “have the best things in life”, etc.

Jealousy appears to begin cultivation at a very early age, perhaps when the school teacher would praise the student who would make high marks, and scold the student who didn't, making that student feel envious of the person who made the high grade. Regardless of its origin, a classic tactic of advertising is to exploit this neurosis by using the media to depict a person with something that you do not have, making you feel as though you need to have it in order to be “equal”. This is very similar to greed, with the exception being that people grow to despise others for what they have, creating social tension and often conflict.

Ego is often defined as ‘a feeling of superiority to others’. This distortion takes essentially two forms:

- 1) General superiority based on wealth class / or position in the social hierarchy
- 2) Arrogance regarding one's creative contribution, demanding prestige, acknowledgement or other “rewards”.

The latter, for many, almost seems “natural”, for people today love to “take credit” for their ideas and inventions. This has a strong reinforcement in the monetary system, for when it comes to making a “profit”, one is literally being “rewarded” and “acknowledged” for their personal inventions and actions. This further compounds the propensity for a person to demand credit for what they do, even if it has nothing to do with money.

It should be pointed out that no human really “invents” or creates anything on his or her own. Every idea and creation that has emerged has been done so based on the contributions of prior generations' work, environmental influences and/or peer feedback. As Isaac Newton once said: **“If I have seen further, it is only by standing on the shoulders of Giants”**¹¹. His point was that he built his research, and hence discoveries, upon the work of many other great scientists who lived before him. His credit therefore is not only his, it goes to the whole body of scientific discovery that he had learned and worked with.

This form of Ego has no position when a person understands that ALL inventions and creations are actually collaborations developed serially, one way or another.

Now, as for the former distinction of Ego noted above (“General superiority based...”) this is a class oriented disposition which, on one level, is a psychological means to make one feel better for having more than another human. A wealthy person walking down the street finds it much easier to dismiss a homeless person, by saying “he is just a lazy bum”, as opposed to recognizing him as a victim of

¹¹ Newton, Isaac, *Letter to Robert Hooke* February 5th 1675

culture. On another level, blind elitism, in the form of a kind of ‘class based racism’ leads people to dismiss those with less purchasing power as simply being “inferior” or “undeserving”, for the social stature, education and lifestyle afforded by this elite, is vastly out of reach for those without similar purchasing power, therefore creating gross differences in culture.

In the end, our values are based on what works and helps us create easier, better lives. If we live in a system that rewards competition, unenlightened self-interest, corruption, vanity and arrogance, then these are the values that will constantly be perpetuated in society. While many people give lip service to ‘honesty, caring for others and humility’, it is easy to see why these qualities do not prevail, for the system of survival in society today does not support or reinforce them.

Mechanism Five

Fiscal Manipulation

Currency used today is called “fiat”, which means its value comes essentially from government decree. In other words, there is nothing “backing up” the value of the currency other than perhaps the sweat of laborers who exchange their services for the currency. Many years ago, most currencies were on a ‘gold standard’ which provided a pseudo-empirical basis for the value of a currency note, but this was still entirely arbitrary, for the source of value was simply shifted to this raw material called “Gold”, which also has no intrinsic value in and of itself. The ‘value’ of any material is relative to its scarcity (supply) and demand, and these attributes are always in flux and hence unstable.

This so-called “supply and demand” equation also applies directly to *Monetary Value*. Value within the fiat system is derived from how much money is in circulation within an economy. Just as with any natural resource, the more money that is in circulation, the less each unit of fiat currency is worth. When less money is in circulation, it makes each unit worth more, respectively. This phenomenon is called “Inflation” and “Deflation”, generally speaking [♦]. Very simply, if new money is pumped into an economy, without regard for the current demand for goods and services, the prices in the economy will eventually rise as the value of the currency becomes worth proportionally less. This is an “Inflationary Effect”. However, if the new money is quickly put to use in the creation of new goods and services, while there exists a demand to purchase those products, it can be introduced into the economy without a substantial inflationary effect. For example, if there is a demand in the market for new homes, and the government injects 1 billion dollars of new money into the economy,

[♦] The classic definition of Inflation is ‘rising prices’ (price inflation), while Deflation is ‘falling prices’. However the primary cause of this ‘Price Inflation’ and ‘Price Deflation’ is the increase and decrease in the supply of money (Monetary Inflation). That being said, this is not the only possible cause of these conditions. Over/Under Production itself can influence this as well. There can also be a period of Inflation and Deflation at the same time, such as when a systemic crisis occurs, which contracts the money supply faster than money can be created and put into it.

and all that money is put to use for creating these new homes, which are then bought, the inflationary effect is minimal.

The increase in the supply of money available in an economy is called *Monetary Expansion*, while a decrease in the supply of money is called *Monetary Contraction*. When both of these forces are in play, you tend to get a cyclical trend, called the “Expansion and Contraction Cycle”, also known as the “Business Cycle” or the “Boom and Bust Cycle”(more on this below). Generally speaking, the Expansion period is usually associated with so called “Economic Growth”, for more money is being put to use and often more jobs are created. Conversely, the Contraction period is often called a Recession or Depression, for money is drying up and hence there is less money to put to use, so jobs are lost and companies fail.

The concept of “Economic growth” is typically defined as: “the increase in the amount of the goods and services produced by an economy over time”. The GDP (‘gross domestic product’) measurement system, which basically compares the ‘income’ and ‘output’ of an economy in a certain time period, is commonly used to gauge this so called “Economic Growth”.

Now, before we go any further, let it be noted that the whole idea of Economic Growth, as it is traditionally interpreted, is *nonsense* with respect to true human development. There is no such thing as true economic growth in and of itself, for the underlying mechanism is based almost entirely on the amount of liquidity (money) in the system. In other words, if I counterfeit 100 million US dollars and give it to you to start a business (you don’t know it’s counterfeit) and you buy and fix up an old building, hire a team of employees and start to produce a product that the public buys, this would be considered an ‘expansion’ of the economy. You have invested in real estate – increased the employment rate – and created new products that others buy, therefore exciting the circulation of currency (the ‘consumption cycle’).

Now, what if it was found out that all that money you had was counterfeit, and the whole operation was shut down? This would be a ‘contraction’ of the economy, for the money thus vanishes; your employees would be laid off, the building foreclosed upon, and the production halted.

Given the above scenario, one should ask: What was the *real* growth? If the increase (expansion) in the supply of money can result in the creation of jobs and production, while the decrease (contraction) results in the loss of jobs and production, what exactly was the point?

To understand this more clearly, we need to look at how money is created and regulated by the government and/or its central bank. For this example, we will use the United States and its central bank- The Federal Reserve.

As noted above, the ‘expansion and contraction cycle’ is a cyclical pattern, which has to do with the infusion and relinquishing of money in the system. This pattern is largely controlled and manipulated by the Central bank (Federal Reserve) by way of *Interest Rates*. An Interest Rate is a fee charged to a borrower for the use of an amount of money. This fee is based on a percentage of the amount borrowed.

Since all money in the US economy and nearly every other economy in the world is created *out of debt* through loans[♦], the speed by which money comes into existence depends on how much a person is willing to pay in interest to acquire that loan. The Commercial Banks base their interest rates on values set by the Central bank.

For example, in America the “Prime Rate” is the lowest interest rate charged by banks to their most creditworthy customers. This rate is based on what is called the “Federal Funds Rate” which is dictated by the Federal Reserve.

Now, it is not the scope of this book to dissect the complex, jargon filled methods used by the banking system. However, the important point here is to understand that the Federal Reserve has the power to influence the interest rates of all banks. *This translates into the power to control the amount of money being borrowed, and hence the amount in circulation.*

When the Fed lowers its interest rates, so do the commercial banks and credit (borrowing) becomes less expensive. When the Fed raises its interest rates, credit becomes more expensive.

In a low interest environment more people are likely to borrow money, put it to use, and create so called “economic growth”(Expansion). In a high interest environment, less can afford to borrow money, less is put to use and economic growth slows or reverses (Contraction).

This is all the so-called “Business Cycle” is, and the Federal Reserve, through its use of interest rate manipulation, can “throttle” the expansion and contraction of money at will, to a certain degree[♦].

Why does the Fed need to control this?

To understand this, you need remember that (1) *all money is created out of debt* (loans), and (2) the increase in the supply of money can lead to Inflation.

If the money supply was allowed to constantly increase (expand), it is simply a matter of time before the market becomes saturated with excess liquidity stifling the resulting economic growth. This will then lead to Inflation, depreciating the value of the currency, raising prices. Likewise, outstanding debt is directly proportional to the money supply, so the more an economy ‘expands’, the greater the debt that is created. This sets up an inevitable systematic crisis for the money needed to pay the

[♦] Chicago Federal Reserve, *Modern Money Mechanics*, 1963

[♦]In the event of economic failure, where debt/inflation exceeds manageability, interest rate manipulation can have little or no effect. More on this in Chapter 2

interest charged on the loans does not exist in the economy outright[^]. Therefore, *there is always more outstanding debt than money in existence*. Once the debt grows larger than a person/company can afford, defaults begin (often in a systematic way), loans slow and/or stop and the money supply begins to contract. This particular scenario of debt overpowering and nullifying expansion could be termed “financial failure”, very simply.

Now, before we go any further, we need to talk about Debt more specifically. It needs to be clearly understood that debt itself is also a very active tool for social control, but not in ways most would consider. In a Monetary System, the whole structure is based on human participation. The structure is always hierarchical, so those at the top of the pyramid always benefit more than the majority at the bottom. Therefore keeping people motivated to be employed and fearful of losing their jobs and thus subservient, is a positive circumstance for those at the top. A person, who “needs” a job, is more likely to take a lower wage, and less likely to cause problems.

One of the most reliable ways to get people to work and maintain subordination is to *put them into debt*. A person in a lot of debt is going to be much more submissive to the system, than a person who has no debt. This mechanism of “Debt Slavery” is little talked about, for most simply do not even think about it. Every dollar in existence theoretically has to be paid back to the banking system and in order to pay that money back, it must be “earned” by the indebted parties, usually through the form of “wage” or “profit”, hence requiring human service/servitude.

This issue is compounded by the reality that there is *always* more outstanding debt than money in existence (due to the interest charged), making the public’s attempt to “break even” within the system futile. There will always be more debt to pay back, ensuring the slavery of the masses.

Now, in the next chapter, we will continue our analysis of the financial system and its policies to point out how the repeated failures of the system are built right into the very structure of it, one way or another.

Before we do, let’s summarize what has been discussed in this chapter:

Summary of Chapter 1:

- Our world is dominated by the practice of Monetary Economics (aka, the “Monetary System”). Based on this system, the ‘value’ of a good or service is generally defined by the *availability* (degree of scarcity) of the resources required, along with the amount/type of *human labor* involved in the production/service. Based on this value theory, if goods and services could be produced with no human labor, coupled with resources that were in complete abundance, the value (price tag) would be

[^] For those not familiar with this reality, see *Web of Debt* by Ellen Brown, Chapter 2.

zero, hence not having a monetary value at all. **If such a situation were to occur, perhaps with the use of automation for labor and chemical processes to find substitutions for scarce resources, the entire financial/profit system would have no true basis and could not exist.**

- A driving undercurrent of the marketplace is *scarcity*. Industry at large wants scarcity, for it increases demand. This reality creates an immediate disregard for the environment/human concern and reinforces abusive methods that **work to *limit* production capacity and resource availability, rather than expand it for the greater good. Therefore, abundance is impossible.** Also, the currency in the system is deliberately made scarce by the central banks, forcing humans to battle each other on a daily basis, with there never being enough to go around, perpetuating poverty and class stratification.

- The Monetary System requires ‘cyclical consumption’, or constant turnover in the marketplace. This translates into a natural propensity/need to create inferior products that break down quickly, for if very long lasting, durable and sustainable products were created, the market would suffer, for less people would have a need to repair or re-purchase a product. This leads to high levels of multiplicity, waste and pollution. **If products in society were actually designed to *last long periods of time*, through the use of the best known materials and methods, the monetary system could not exist, for it can only work when constant financial “input” is generated by purchases.**

- The most important issue for a human being is survival, and in a Monetary System this inherent self-interest translates into the constant pursuit of ‘Profit’. This mentality has proven to cause far more problems than benefits for society, for social concern is always second to monetary gain. If industry truly ‘cared’ about society, putting the welfare and best interests of people as the first priority, the *monetary system would not work*, for the entire orientation of the structure requires “differential advantage”. In other words, ‘equality’ and ‘fairness’ have no place in a system where the entire basis of survival has to do with competition. Of course, advocates of the system will tell you that the system creates “incentive”, but this incentive is really the incentive for monetary gain and nothing more. Meaningful contributions to society in this system are a chance byproduct, not the initial intent. Financial corruption is also always constant, with many forms simply accepted as “the way it is” and legal. Concurrently, *War* is the ultimate form of economic stimulus and this makes death and destruction a positive thing for those who are in commercial/political positions to benefit from it. War is in fact wanted by industry, regardless of its inhumanity. **Given this reality, war will likely never go away as long as the profit system is in place, while human behavior itself will always have an abusive propensity, due to the need to gain advantage over each other for survival.**

- The Human Value System is largely a product of the environment. The influence of the Monetary

System, in both the ruthless mentalities it necessitates for gain, along with the distorted values created by advertising agencies to condition people into buying something, has created a culture of vain, selfish, aggressive and insecure people. Vanity, Ego, Jealousy and Greed are all byproducts of the system and when it comes to the 'promotion' of sales, the end result is more important than the means. Likewise, the competitive, self-interest oriented motivation inherent in the pursuit of profit creates a general disregard for the well being of others, perpetuating inclinations for abuse and advantage.

- Money used in the world today is Fiat and is usually regulated by the Central Banks. In the United States, the Federal Reserve (its central bank) manipulates interest rates in order to control the expansion and contraction of the money supply. Debts generated by loans (remember that money comes into existence from loans; hence money is created out of debt) are exaggerated by the use of interest, for the money to pay back the interest charged on the loan is never respectfully created in the money supply. Therefore, when the money supply is expanded, typically creating "economic growth" (new money being put to use), a proportionate amount of debt is created as well, forcing people to submit to employment to afford the debt obligation.

Since the interest + principle of the outstanding loans will always exceed the available money supply, this aspect constitutes nothing less than a form of economic slavery, for it is virtually impossible for the collective public to ever get out of debt. Also, the term 'Economic Growth' is actually nonsense, for all expansive growth is temporary and must be counter balanced by contraction. The only reason more jobs are created is because more money is in circulation.

Chapter 2: The Final Failure

Beyond Irresponsibility:

David Walker, former US Comptroller General and chief of the GAO, warned before the 2004 election that if large economic changes were not made, by 2009 the United States and its taxpayers would not be able to afford the interest payments on the national debt¹². A study authorized by the US Treasury in 2001 found that in order to keep servicing the debt at its current rate of growth, by 2013 income taxes would need to be raised to 65%¹³.

If the United States cannot afford to pay the interest on its debts, that would be the final stage of economic collapse and hence result in a total textbook bankruptcy. The systematic crisis would in turn likely spread to the rest of the world, due to the financial/commercial interconnections inherent.

¹² Al Martin , *Protocols for Economic Collapse in America* (article) 2008

¹³ Ellen Brown, *Web of Debt*, Third Millennium Press p.368

How did this happen? Why is the US national debt \$12,250,000,000,000 as of Jan 2009? Of the 203 countries in the world today, only four (!) do not owe others money. The collective external debt of all the governments in the world is now about 52 trillion dollars¹⁴ and this number doesn't include the massive amount of *household debt* in each country

The whole world is basically bankrupt. But how? *How can the world as a whole owe money to itself?*

Obviously, it's all nonsense. There is no such thing as 'money'. *There are only planetary resources, human labor and human ingenuity.* The monetary system is nothing more than a game... and an outdated and dysfunctional one at that.

Those in positions of social power alter the rules of the game, at will. The nature of those rules is guided by the same competitive, distorted mentalities that are used in everyday "monetary" life, only this time the game is rigged at its root to favor those who run the show.

For example, if you have 1 million dollars and put it into a CD at 5% interest, you are going to generate \$50,000 a year simply for that deposit. You are making money off of money itself... paper being made from other paper ... nothing more - no invention - no contribution to society - no nothing.

That being denoted, if you are a lower to middle class person, who is limited in funds, and must get interest based loans to buy your home or use credit cards, then you are paying interest to the bank, which the bank is then using, in theory, *to pay the person's return with the 5% CD!* Not only is this equation outrageously offensive due to the use of usury (interest) to 'steal from the poor and give to the rich', but it also *perpetuates class stratification* by its very design, keeping the lower classes poor, under the constant burden of debt, while keeping the upper classes rich, with the means to turn excess money into more money, with no labor.

That reality aside, there are other games in the system which have worked for decades, but are just now starting to bloom into the inevitable mathematic disasters that should have been anticipated 100 years ago.

- **The 'Boom and Bust Cycle' (aka - "The Business Cycle")** -

Surface definitions of the "Business Cycle typically read: "the recurring fluctuations in economic activity consisting of recession and recovery and growth and decline"¹⁵ However, this says nothing about the cause of the fluctuation. While there are various theories on the cause, it seems most economists tend to shy away from the 'elephant in the living room'... and that is the powerful effect

¹⁴ CIA World Factbook ,2009, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2079rank.html>

¹⁵ wordnet.princeton.edu/perl/webwn

Monetary Contraction (money removed) and Expansion (new money added) have on the Business Cycle.

When money is added to the money supply, that money is then typically put to use for some reason. Very often these reasons include starting a business, buying a home, investing in the stock market, etc. This application of money often translates into so called “economic growth”. *Credit Expansion*, in the form of personal and business loans, is really the hidden force behind economic growth. This is basically the ‘Boom’ period of the Boom and Bust cycle. If you examine prior trends of economic expansion in the United States, you will find a lockstep correlation to the expansion of credit. (ie. 1990-2000 stock market bubble)

Unfortunately, money cannot be added into the economy infinitely, for the *Debt* and *Inflation* caused by the expansion will eventually overcome the “growth” benefits. This is due to the reality that new money is always needed to cover the outstanding debt, largely due to the need to pay back the interest on the loans (which does not respectfully exist in the money supply).

What this means is that after a period of growth (boom) with the economic indicators now pointing towards a weakening economy, a choice can be made by the financial regulators/government to either:

[1] Continue the expansion by infusing even more money, often by lowering the interest rates (such as the ‘prime’ or ‘discount’ rate) or by simply moving large sums of money to certain sectors (such as the 2008 700 Billion dollar bank bailout).

or [2] Let the contraction (recession) run its course, raise the interest rates, and bring the economy back to some kind of equilibrium, thus preparing it for another expansion. ♦

As far as history is concerned, the pattern has been to do both, basically with the idea being to “ease” the recession by increasing liquidity. The reasoning is simple. It is politically unpopular for the ruling class to have unemployed, poor citizens. This can lead to contempt for the leadership and perhaps revolution. Therefore, there is always the game of placating the public with false security in order to avoid the truth coming out about the inherent dysfunctionality and corruption of the Ponzi scheme known as the Monetary System ▲

Now, the result of this “easing” of the contraction simply delays the inevitable and since the US Government has “eased” virtually every contraction we have seen in the last 70 years by infusing

♦ These are generalized, summary examples. It is not in the interest of this booklet to detail all components and attributes.

▲ In a system where money is created on top of money out of debt, with interest charged, creating more debt owed back than is even in circulation- this system is a textbook pyramid scheme. The tool is called the “Fractional Reserve System”. Read *Web of Debt*, chapter 2, by Ellen Brown, for more about this monetary expansion policy.

more money into the system, a “Doomsday scenario” awaits...the “big contraction”... and it might be happening at the time of this writing.

Figure 1 below is the idealized business cycle, moving about a constant mean, with peaks as the “boom” and troughs as the “bust”:

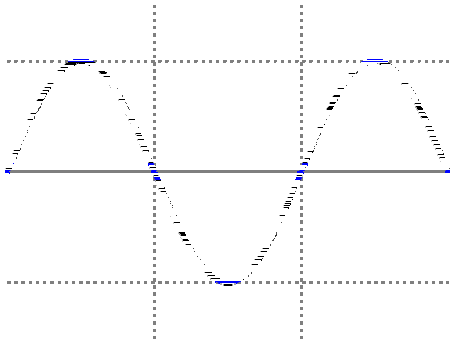
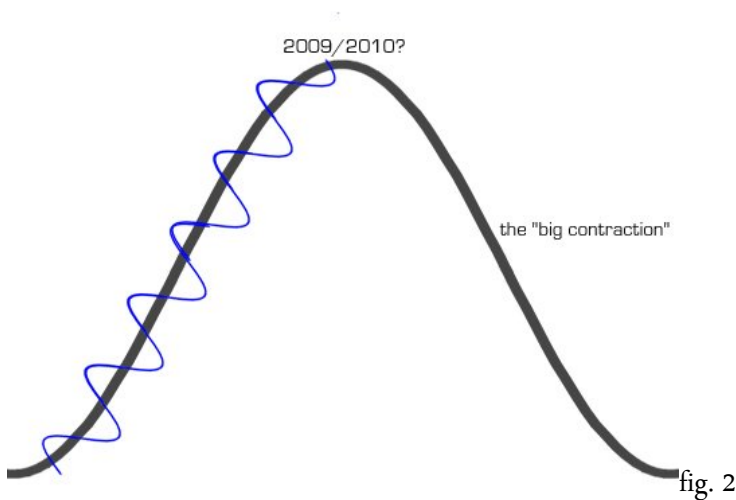
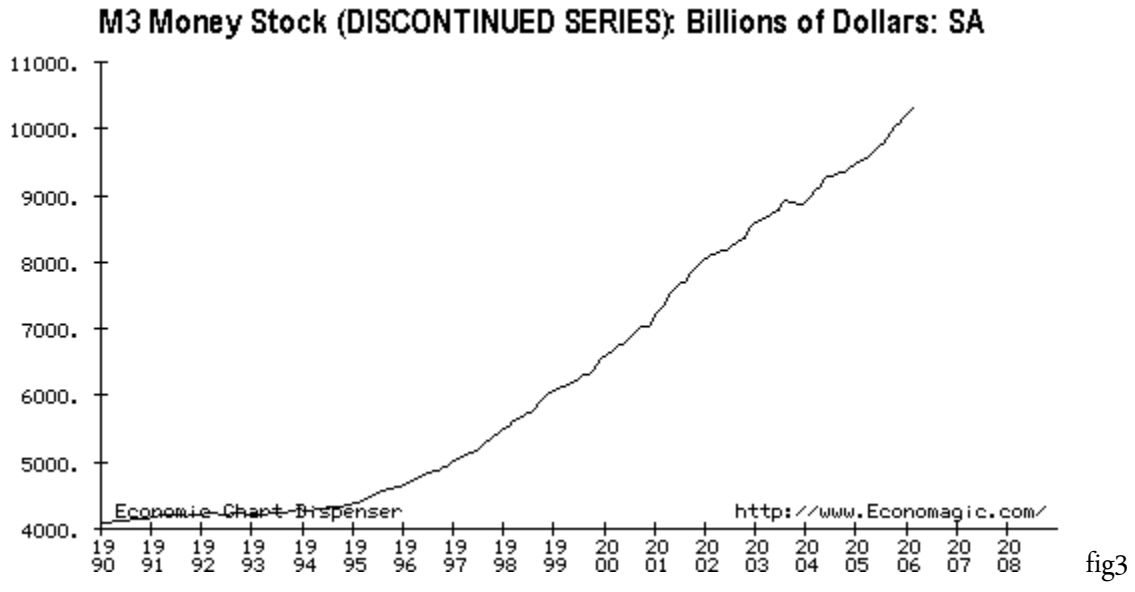


fig 1

But considering that money has always been strategically injected into the system when contraction occurs, the ‘mean’ path is actually ascending. Figure 2 below is an idealized depiction of what has actually been happening for the past 70 years and what could be in store as the “big contraction” looms.



As of March 2006, the US Government stopped reporting M3, which is the total amount of money in the economy in virtually all forms. What is the reason for this? - they don't want the public to realize how much money is being pumped into the system. Figure 3 below shows M3 up until they stopped reporting it.



Regardless of the discontinued reporting by the Fed, secular economists have been able to track the components of the M3 independently ♦ and what has been noticed is that since 2006, M3 has grown from about 10 trillion to 14.5 trillion by the end of 2008, a near 50% increase in less than 3 years. (Figure 4).

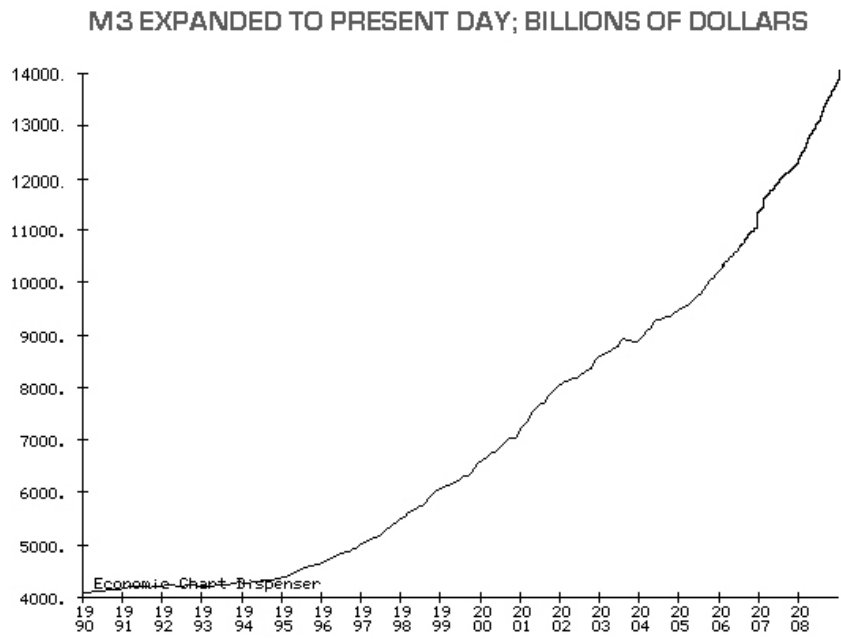


fig. 4

♦ http://www.shadowstats.com/alternate_data/money-supply

How far can we go? At this rate, by 2015, the money supply will be about 30 trillion dollars.

Now, just because money is being pumped into the system does not always mean economic expansion is occurring. This is a critical point. For instance, one of the hallmark indicators of economic expansion is the creation of jobs. Figure 5 below shows the US unemployment levels, including the SGS[^] component which takes into account those non-working Americans who are not currently counted as “unemployed” simply because the period of acknowledgment has ended.

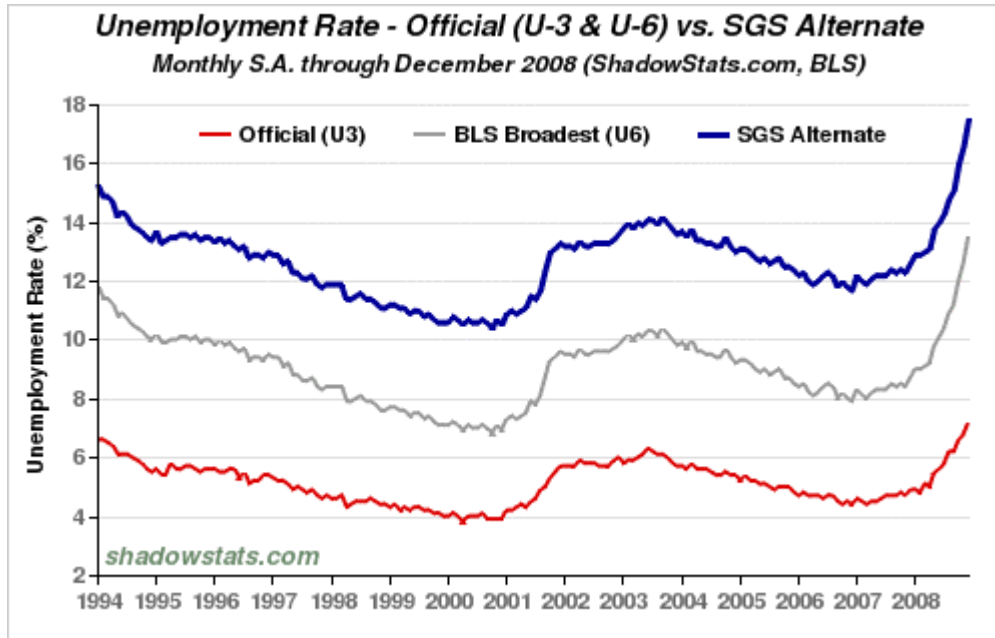


fig. 5

While official government agencies reported that unemployment was around 7% at the end of 2008, deeper research reveals it is actually closer to 18% of the US population. More on the reasons for this reality will be addressed in the next section. (The Ultimate Outsource), but for now let's simply use this information to understand that the current infusion of money into the money supply is not having an effect in the current financial crisis.

As noted earlier, money cannot be added into the economy infinitely, for the *Debt* and *Inflation* caused by the expansion will eventually overcome the “growth” benefits. This is what is now happening and no intervention (bailout) to “ease” this crisis is likely to work.

[^] The SGS Alternate Unemployment Rate reflects current unemployment reporting methodology adjusted for SGS-estimated “discouraged workers” defined away during the Clinton Administration added to the existing BLS estimates of level U-6 unemployment. http://www.shadowstats.com/alternate_data

Why? -Mainly because the debt levels are too high. Total debt of the US government *plus* its citizens was about 53,000,000,000,000¹⁶ in 2007(Figure 6). This is insane when you realize that in 2007 the total US money supply (M3) was only about 12,000,000,000,000. Are we going to now inject over 40 trillion dollars into the US economy to cover this? No- because not only would this create trillions in new debt, it would likely cause hyperinflation on a grand scale. From a different angle, the GDP of the US in 2007 was only about 14 trillion!¹⁷

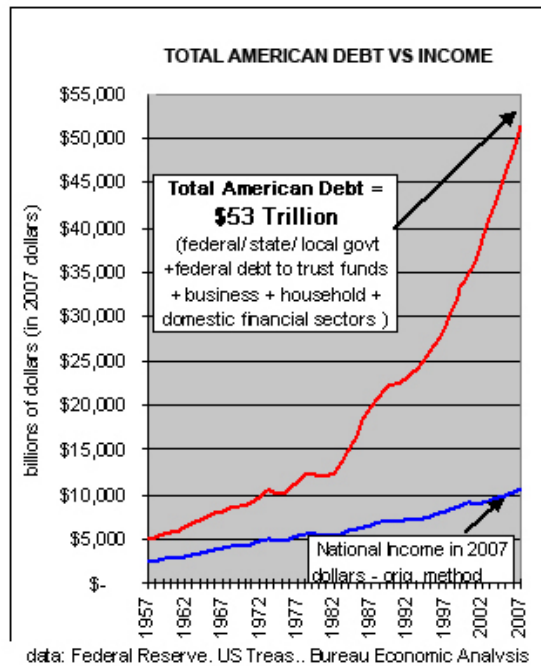


Fig. 6

Right now (2009) it is deflation *and* inflation, occurring at the same time, with deflation, in the form of contraction, winning. Money is vanishing faster than it can be put in, to put it loosely. While the system itself sets up this inevitability on its own, the chain of events for the current collapse seemed to start with the rampant speculative bubble in the housing market. Once that crashed, the Derivatives market, (which is holding values that exceed the GDP of the entire planet many times over¹⁸) which gambled on those home mortgages, became “toxic” due to the foreclosures. This triggered the failure of the investment banks; along with the failure of the commercial banks following; which leads to the failure of corporations that require credit; inevitably arriving at the laying off of the work force itself. This systemic crisis is global, due to the international nature of the Financial Markets, which is why the countries in the western world are now seeing similar economic problems as America.

¹⁶ <http://mwhodges.home.att.net/nat-debt/debt-nat-b.htm>

¹⁷ <https://www.cia.gov/library/publications/the-world-factbook/print/us.html>

¹⁸ Brown, Ellen, *Credit Default Swaps: Evolving Financial Meltdown and Derivative Disaster Du Jour*, webofdebt.com, 2008

However, please note that even though it seems as though the housing bubble and “predatory loans” are “to blame” for this crisis, they really aren’t. This failure would have occurred one way or another due to the very nature of the economic system. However, the incredible irresponsibility involved in managing this already detrimental system has greatly exaggerated and accelerated the severity of pending collapse, making the future look very grim if this *false* structure, known as the “Monetary System”, is to be maintained.

The Ultimate Outsource:

Everything described in the preceding section is of great importance in terms of understanding where we are and where we are going within this economic structure. Please note this information is just as relevant to non-Americans as it is to Americans, for the world shares the same basic system and is tightly interlinked.

Now, in response to these problems, very often people suggest ‘monetary reform’ as the solution. These suggestions often consist of: going back to the gold standard; outlawing interest; shutting down the Federal Reserve and giving the power of printing money to the government and letting the government distribute it debt free...etc.

While these reforms and others all pose logical merits, they do not recognize an unstoppable phenomenon that has accelerated since the early 20th century, which has greatly impacted the labor force since:

The replacement of human labor with machines.

At the core of the economic system itself is the mechanism of *Labor for Income*. Our entire economic system is based on human beings selling their labor as a commodity in the open market. If humans do not have the option to “work for a living”, then the monetary system as we know it is over. No one can buy goods if they don’t earn money. Companies cannot afford to produce if the consumer has no purchasing power. *This issue overrides everything that has previously been discussed in this chapter.*

As John Maynard Keynes, in *The General Theory of Unemployment, Interest and Money* disdainfully points out:

”We are being afflicted with a new disease of which some readers may not yet have heard the name, but of which they will hear a great deal in the years to come – namely ‘technological unemployment’. This means unemployment

due to our discovery of means of economizing the use of labor outrunning the pace at which we can find new uses for labor.”¹⁹

While politicians, business leaders and labor leaders bicker over issues they claim are responsible for the growing unemployment in the world, such as foreign company outsourcing or immigrant labor, the **real cause** is going unaddressed in the public debate: *Technological Unemployment*

In the words of Nobel Laureate Economist Wassily Leontief:

”The role of humans as the most important factor of production is bound to diminish in the same way that the role of horses in agricultural production was first diminished and then eliminated by the introduction of tractors.”²⁰

Since Market Capitalism is built upon the logic of reducing input costs (including the costs of labor) to increase profits, the inclination to replace human labor whenever possible by machine automation is a natural progression of industry. After all, a machine doesn’t need to take breaks, it doesn’t require health insurance or benefits, and it isn’t a part of a demanding Labor Union.

A simple glance at US historical labor statistics by sector shows the pattern of machine automation replacing human labor definitively. In the Agricultural sector, almost all traditional workflow is now done by machine. In 1949, machines did 6% of the cotton picking in the South. By 1972, 100% of the cotton picking was done by machines.²¹ When automation hit the US Manufacturing Sector in the 1950s, 1.6 million blue-collar jobs were lost in 9 years²². In 1860, 60% of America worked in Agriculture, while today it is less than 3%.²³ In 1950, 33% of US workers worked in Manufacturing, while by 2002 there was only 10%.²⁴ The US steel industry, from 1982 to 2002 increased production from 75m tons to 120m tons, while steel workers went from 289,000 to 74,000.²⁵

In 2003, Alliance Capital did a study of the world’s largest 20 economies at that time, ranging from the period of 1995 to 2002, finding that 31 million manufacturing jobs were lost, while production rose by 30%²⁶. This pattern of *Increasing Productivity* and Profit, coupled with *Decreasing Employment*, is a new and powerful phenomenon, with no changes in sight.

So... where have those jobs gone? - The Service Sector. While from 1950 to 2002, the percentage of

¹⁹ Keynes, John Maynard, *The General Theory of Unemployment, Interest and Money*, 1931

²⁰ Leontief, Wassily, *National Perspective: The Definition of Problems and Opportunities*, June 30th 1983, p3

²¹ Peterson, Willis, *The Cotton Harvester in Retrospect: Labor Displacement or Replacement?* St Paul, 1991, pp 1-2

²² Kahn, Tom, *Problems of the Negro Movement*, Dissent, 1964, p 115

²³ “Why job growth is Stalled”, *Fortune*, 3/8/93 p.52

²⁴ http://www.usatoday.com/money/economy/2002-12-12-manufacture_x.htm

²⁵ Schwartz, Nelson D. *Will 'Made in the USA' fade away?* *Fortune* Nov 24th 2003, p. 102

²⁶ *US Weekly Economic Update: Manufacturing Payrolls Declining Globally: The Untold Story*, Alliance Bernstein Oct 2003

Americans employed in the service industries went from 59% to 82%²⁷. For the last 50 years, the service sector has been absorbing the job losses from Agriculture and Manufacturing.

Unfortunately, this pattern is slowing fast as computerized automation takes hold. From 1983-1993, banks cut 37% of their human tellers, and by the year 2000, 90% of all bank customers used teller machines (ATMs)²⁸. Business phone operators have almost all been replaced by computerized voice answering systems, post office tellers are being replaced by self-service machines, while cashiers are being replaced by computerized kiosks. McDonalds, for example, has been talking about full automation of its restaurants for many years now, introducing Kiosks to replace the front of house staff, while using automated cooking tools, such as burger flippers, for the back of house staff²⁹. The fact that they haven't done so is likely a public relations issue, for they know how many jobs would be cut in the event they did automate.

There isn't one area of the Service Industry that isn't being affected by computerized automation. In fact, if one was to think creatively about the application of technology that currently exists, but is not yet applied to the service sector, it is easy to see how, almost overnight, the majority of all service jobs could be phased out today, starting with tellers, cashiers, waiters, and phone operators.

Economist Stephen Roach has warned:

"The service sector has lost its role as America's unbridled engine of job creation."³⁰

As this transition occurs, where is the emerging new sector to employ all the newly displaced workers? There really isn't one...at least not yet. While there are many specialized fields emerging in the Information realm, they are extremely limited in their ability to offer anything close to compensation for the vast job loss on the horizon. And while economists struggle to create models to deal with this issue of nearly unstoppable unemployment, ranging from the government subsidization of labor (welfare) to novel notions such as a 'negative income tax', most refuse to consider what is really needed in order to prevent total chaos on this planet. The solution lies not in attempting to 'fix' the issues that have emerged, but rather it is time we transcend the system in its entirety... for the system of monetary exchange, along with Capitalism itself, is now completely obsolete in the wake of technological creativity.

Summary of Chapter 2:

The Monetary System of the world is nothing more than a game. It has little basis in reality. It emerged thousands of years ago when scarcity of resources was an everyday problem. People back

²⁷ http://www.usatoday.com/money/economy/2002-12-12-manufacture_x.htm

²⁸ *Retooling Lives*, Vision 2000 p. 43

²⁹ http://www.techdirt.com/articles/20030801/1345236_F.shtmls

³⁰ Interview, 3/15/94 noted in *The End of Work* (by Jeremy Rifkin), p. 143

then needed some way to distribute goods and services, while compensating those who worked to create them. This Monetary based Labor System has been a staple of society for so long, that most people can't even imagine a world without it. Regardless, the mechanisms of the system, both structurally and psychologically, have created dramatic problems for the whole of society, ranging from monetary crime and emotional distortion, to the abuse and exploitation of the planet and each other on vast scales. The world today is really just a series of tribalistic *Mafias*. The line between organized crime and traditional business is really nonexistent. In turn, the whole world stands at odds with itself, with individuals, businesses and countries perpetually working to defend what they have, while always working to gain more, often by force and corruption. In turn, now the whole world is in debt to itself, owing comical amounts of money, while the very integrity of the world financial structure is on the verge of collapse due to its own shortcomings.

However, even with these points denoted, there stands an even more powerful, unforeseen force which guarantees the demise of the Economic system as we know it for good, and it comes in the form of *Technological Unemployment*. Human beings are being replaced by advanced automation technologies at an accelerating rate, setting up a disaster of unprecedented proportions, for if people do not have jobs, they cannot support the economy by purchasing anything. This reality is the final proof that our current system is now out of date, and if we want to deter riots in the streets and poverty on a scale never before seen, we are going to have to revise our traditionalized notions about how society functions at the fundamental level.

We require a new social system that is updated to present-day knowledge and modern methods.

- Part 2: What is Relevant? -

Chapter 3:

Natural Law

When we step out of the societal complex and examine ourselves and the world from a broader perspective, we tend to find that there is a tremendous amount of *noise in the system*. In other words, the fundamentals of life have been lost in a sea of social, occupational and financial obligations, many of which are largely artificial. For example, the need for money and income puts the human into a position where choice is often very limited. Usually, the work found for income does not reflect the genuine interests of that particular person, nor the interests of society as a whole. If we were to examine the occupations that exist today, we would tend to find that a great majority of them serve no larger function than the perpetuation of 'cyclical consumption'. This arbitrariness

constitutes a tremendous waste of life and resources. For instance, a person who *sells insurance* is participating in an occupation that is only relevant to the inner workings of the monetary system, and has no basis in nature in regard to a real 'contribution to society'. The same goes for stock brokers, traders and anything else that deals with the financial sector. These are arbitrary, vain roles that contribute nothing real to society in the long term. While it will be argued that the role they serve affects people on a day to day basis within the economic system, it is time we really step back and begin to focus our efforts on social issues that are *actually relevant to social progress...* as opposed to arbitrary jobs conjured up to extract wealth from each other. This is a waste of life. Consequently, the entire educational system in the modern day is nothing more than a cookie cutter processing plant that prepares humans for mostly predefined occupational roles. This element of human life has become so traditionally ingrained, that many falsely consider the nature of 'having a job' some form of human instinct. Even parents will ask their kids "What do you want to be when you grow up?" as though there was only one thing. This is disturbing and a violation of human potential.

Now, for the sake of argument, let's forget about the current modes of conduct in society and consider what is actually *real*. Let's pose the question:

What are the near-empirical facets of nature and what do these understandings teach us about how we should govern our conduct on this planet?

Natural Law 1:

Every human needs adequate nutrition, clean air and clean water and therefore must respect the symbiotic environmental processes inherent.

Firstly, about 40 percent of the deaths worldwide are now caused by water, air and soil pollution.³¹ This is a staggering percentage. How can society take itself seriously when we can't even keep our most vital life supporting natural resources and processes in good form?! Why are many so-called scientists today working on esoteric interests like 'black holes', 'quantum fields' and 'terra-forming' other planets, when we can't even take care of ourselves yet!

The fact is, most humans do not understand or consider the interconnectivity of nature and the chain of processes by which our food, air and water currently come about. However, if we examine and learn from these processes, a logical train of reasoning, coupled with suggestive inference, will guide us to more appropriate human behaviors that will help fulfill our needs.

For example, water and air are naturally abundant planetary resources that only require that we, the

³¹ http://www.eurekalert.org/pub_releases/2007-08/cuns-pc4081307.php

human population, maintain them and preserve their sources. Sadly, our impulsive, narrow sighted profit system has seen to it that usable water is now approaching crisis scarcity, for Industry continues to pollute the system at every turn. Air, on the other hand, while still very abundant overall, has been heavily polluted in areas of high human concentration, to the effect where in Asia many wear facemasks when they walk around. Of course, polluted air and water lead to countless other problems. In the United States alone about 3 million tons of toxic chemicals are released into the environment a year -- contributing to birth defects, immune system disorders, cancer and many other serious health problems.³² In turn, even the source processes of our air and water are being compromised. From acid rain to deforestation, we are seeing a continual breakdown of what used to be a natural, clean abundance.

In regard to food production, we must first note that Industry today goes out of its way to produce the cheapest, most competitive food, while consequently sacrificing nutritional health. For example, a great majority of foods today have what is called "high fructose corn syrup". This cheap replacement for cane sugar has been proven to increase the risk of Diabetes and other health problems substantially.³³ Why do we have it!?!...because it is profitable and the public, always being cost conscious, buys it because it is more affordable.

The symbiotic relationship of natural processes has a built in frame of reference, which is assessable by understanding how the world *actually* works, via scientific investigation. **Our behavior should be guided by the priority of seeking the highest optimization of circumstances that preserve and maximize the abundance and quality of our necessities of life.** Sadly, this is not happening.

The fact is, our sustainability is under severe threat by the current methods we are using. The monetary system continues to operate with the interest of short-term gain, ignoring the long-term destruction. As Natural Law denotes, we need high quality air, food and water to live, therefore, we *must overcome any systems which disturb, or create the propensity to disturb, the symbiotic environmental processes which keep our basic needs in order.* If we don't, the consequences of our violation of this law could put us past the point of no return environmentally - and thus the survival of the human race will be in question.

Natural Law 2:

The only constant is change and human understandings are always in transition.

There is no evidence to support the idea that anything we think is true today will maintain its integrity tomorrow. And yes, paradoxically, this goes for everything you are reading here. While

³² http://www.eurekalert.org/pub_releases/2007-08/cuns-pc4081307.php

³³ <http://www.diabeteshealth.com/read/2008/08/20/4274/the-dangers-of-high-fructose-corn-syrup/>

certain observed natural phenomena may seem near empirical based on current scientific evidence, the specifics of each notion will *always* be altered, for our tools and methods of analysis and measurement are *always changing* and hopefully, improving.

In the words of C.J. Keyser:

”Absolute certainty is a privilege of uneducated minds and fanatics”³⁴

A cursory glance at widely defended historical notions, from the earth being flat to the sun revolving around the earth, teaches us that intellectual change is constant and, in turn, humans *must* keep as ‘open’ a mind as possible to new information, even if it challenges that person’s sense of identity. It is an unfortunate evolutionary side effect that in modern culture, a great deal of ego is involved with beliefs and values. Religion, for example, tends to hold tight to static worldviews that often reflect an understanding of reality that stretches back thousands of years prior. Due to the very construct of many religious ideas, which tend to threaten metaphysical consequences (heaven/hell) for those who contradict its teachings, many people in the world today maintain these worldviews out of fear, rejecting new information that could help them in their lives, not to mention society itself. Of course, religion is far from alone in this, for it seems most humans tend to want to believe that what they find *right and true* is empirically correct. This, of course, makes sense, for society today often belittles those who “don’t know.”

Everything we think and “know” are only probabilities and with modern methods of analysis, which have proven to have proactive benefits to society over long periods of time, we can now weigh our understandings and beliefs on a sliding scale, ranging from *least probable* to *most probable*, based not on human opinion or subjectivity, but on concrete *feedback responses* from the natural world.

The Scientific Method:

Nature itself has its own set of laws, and it doesn’t have the capacity to recognize or care about what you or anyone else wants to believe is true. Given this reality, it is in our best interest to learn and *align* with nature as best we can. Walking with the current of the ocean is much easier than fighting against it... and while one could *believe* with all their heart that they can walk on a ceiling with no physical aides, the Law of Gravity will not allow it.

The best-known method for the discovery and application of the laws of nature is termed: “The Scientific Method”.

The Scientific Method basically has three steps:

³⁴ Fresco and Keyes, *Looking Forward*, Barnes, 1969, p. 62

- 1) Recognizing a new idea or problem that needs to be solved.
- 2) The use of logical reasoning[♦] to create a hypothesis, considering all information available.
- 3) Test the hypothesis in the physical world through observation.

The Scientific Method refers to a body of techniques used for investigating phenomena; acquiring new knowledge; correcting and integrating previous knowledge and the application of such knowledge. The techniques used consist of empirical observation methods, (such as measurement), along with reasoned hypotheses and, ultimately, putting those hypotheses to test in the real world to obtain feedback regarding an idea's validity. All conclusions require testable *proof*, not just inference or reason. While *logical reasoning* is important to the unfolding of scientific inquiry, it is still subject to failure, *for each one of us is always in a state of limited knowledge*.

A classical example of this goes back to Aristotle (384 BC – 322 BC). He hypothesized, through logical reasoning based on what he understood at that time, that *a heavy object would fall faster than a lighter object of the same shape and material*. He logically assumed that the more weight an object had, the faster an object would fall in a vacuum. However, he didn't *test* the idea.

Because of this failure to properly use the scientific method, the world had to wait 2000 more years, for when Galileo finally tested Aristotle's hypothesis...he found Aristotle to be wrong - weight *does not* determine the rate at which an object falls in a vacuum.

The point here is that it doesn't matter how *correctly reasoned* our conclusions might be, they have to be *tested*. If we throw water onto a wood burning fire, the fire will likely go out. This gives us a certain degree of information that we gain inference from: "Water puts out fire". While this theory might hold true for most fire scenarios, if you throw water onto an *Oil Fire*, the oil will quickly float to the top of the water and the fire will spread. Therefore the hypothesis that "Water puts out fire" is not exactly true, and would need to be revised to take this new scenario into account.

The Scientific Method is also an attitude; a perspective. No matter how 'right' something may *seem*, we are going to check it out by observational testing and actually *see if it holds validity*. In fact, we should to be very skeptical of *any* claim that cannot be seen or tested in the physical world.

In the words of Stuart Chase:

"[The scientific method] is concerned with how things *do* happen, not how they ought to happen. Most of us are amateur scientists today, though we are seldom aware of it...The scientific method is not primarily a matter of

[♦] 'Logic' is hereby defined as: a method of human thought that involves thinking in a linear, step-by-step, *cause and effect* oriented manner, taking into account as much relevant information as possible, in order to reach a conclusion or hypothesis.

laboratories and atom-smashers or even meter sticks; *it is a way of looking at things*, a way of gathering from the world outside knowledge which will stay put, and not go wandering off like the wickets in Alice's croquet game."³⁵

The scientific method of inquiry is what has allowed the human species to gain comprehension of themselves and the physical world. For better or for worse, it is what's behind virtually every advancement that has improved the lives of the human species. While some might debate what constitutes "improvement", there is nothing else in life that holds a candle to the vast amount of creation and freedom that science has made possible. All of the physical and material benefits humankind enjoys is a product of scientific inquiry. From the electric light, to the cotton gin, to Penicillin, to the telephone, to the Internet...science has continually made what was previously considered impossible...possible. Even the most arcane, traditionally oriented religious believer will usually give in to the world of science and go to a hospital for medical care in an emergency.

However, most in our romanticized world still tend to view science as a cold, heartless medium, while citing distorted human value abominations such as the Atomic Bomb in refutation of the scientific perspective. In reality, science and technology are only tools, and like anything, they can be used for productive or destructive purposes. That is *our* choice.

Dynamic Equilibrium

"Dynamic Equilibrium" occurs when two or more opposing processes proceed at the same rate. Let's say, for a simplified example, that you have a small island with a (1) wildly growing annual carrot crop, (2) a family of rabbits and (3) a family of wolves. The rabbits need the carrots to eat and thus survive, while the wolves need the rabbits to eat and thus survive. In each pair, there is an equilibrium that must exist based on the *carrying capacity* of the island. If there are not enough carrots to feed the current population of rabbits, some rabbits will not survive. If there are not enough rabbits to feed the wolves, some wolves will not survive. If the carrot crop is destroyed by drought, then no one survives.

In other words, there is an equilibrium that exists in the physical world, which dictates, on some level, what the possibilities are for those organisms that utilize the available resources for survival. With respect to our planet, we would call this the "carrying capacity of the earth".

Due to the monetary system, most materials on the planet are owned by a number of private corporations. These corporations do not honestly reveal their stock, for to do so would have ramifications, financially. Even worse, it is in the best interest of these corporations to *perpetuate scarcity* as best they can, for scarcity means more value for each unit, and hence, more profit.

³⁵ Chase, Stuart, *Tyranny of Words*, Harcourt Brace, NY, 1938, pp.-123-24

The human management of the Dynamic Equilibrium on this planet, *which is the most important initial variable regarding the management of society* itself, can only come from first understanding what the carrying capacity of the earth actually is. The needs of the human population must be in balance with the resources of the earth.

That being said, what do we know and what can we infer about the planetary sources available?

The fundamental building blocks of human survival in society consist of the following:

- 1) Energy
- 2) Industrial/Technological Raw Materials
- 3) Food, Air and Water

(1) Energy is the cornerstone of society today. It is one of the most critical factors to all social functionality. The availability of *renewable energy resources* must first be accessed before anything else. Luckily, the results are staggeringly positive. By the early 21st century, a sea of renewable energy sources have been coming to the surface, many with extreme potential, far exceeding the requirements of the current human population. The age of Oil and fossil fuels, along with all the resulting pollution, is coming to a close. There is no reason to burn fossil fuels at all anymore, other than the profit oriented, vested interest which keeps new energy prospects at bay. Remember, the *last* thing the Energy Industry wants is *abundance*, for that translates into a loss of profits in the monetary system.

Now, one of the most important energy sources to recognize today is *Geothermal Power*.

A 2006 MIT report on geothermal energy found that 13,000 zettajoules of power are currently available in the earth, with the possibility of 2000 zettajoules being easily tap-able with improved technology.³⁶ The total energy consumption of all the countries on the planet is about half of a zettajoule a year³⁷, this means about 4000 years of planetary power could be harnessed in this medium alone. And when we understand that the earth's heat generation is constantly renewed, this energy is really limitless and could be used forever.

Geothermal aside, Solar, Wind, Wave and Tidal energy sources also offer powerful possibilities if harnessed efficiently with technology. The *solar radiation* striking the Earth's surface each year is more than 10,000 times the world's energy use³⁸. The problem then is not availability - it is the technology to harness it most efficiently. From simple *photovoltaic* panels that can capture energy

³⁶ MIT, *The Future of Geothermal Energy*, 2006

³⁷ Based on 2005 figures, *World Consumption of Primary Energy by Energy Type and Selected Country Groups, 1980-2004*

³⁸ <http://encyclopedia2.thefreedictionary.com/solar+energy>

into storage batteries for private use, to full scale solar power plants, new technology is constantly emerging which is improving this potential.³⁹

Wind power, while often denounced as weak and impractical, is a lot more powerful than most people think. U.S. Department of Energy studies have concluded wind harvested in the Great Plains states of Texas, Kansas, and North Dakota could provide enough electricity to power the entire nation.⁴⁰ More impressively, a 2005 Stanford University study published in the *Journal of Geophysical Research* found that if only 20% of the wind potential on the planet was harnessed, it would cover the entire world's energy needs.⁴¹

And then there is Tidal and Wave Power. Tidal Power is derived from tidal shifts in the ocean. Installing turbines, which capture this movement, generates energy. Tapping the flow of the Gulf Stream, Icelandic current and other underwater currents can be harnessed. In the United Kingdom, 42 sites are currently noted as available, forecasting that 34% of all the UK's energy could come from Tidal Power alone.⁴² More effectively, Wave Power, which extracts energy from the surface motions of the ocean, is estimated to have a global potential of up to 80,000 TWH a year.⁴³ This means 50% of the entire planet's energy usage could be produced from this single medium.⁴⁴

It is important to point out that tidal, wave, solar and wind power require virtually no preliminary energy to harness, unlike coal, oil, gas, biomass, hydrogen and all the others.

The fact is, energy is nothing but abundant on this planet.

The only reason people today think it is scarce, is because of the monetary/capitalist system and its strategic propensity to *create scarcity*.

(2) The next question is *what about industrial raw materials?* Can the earth's supply of raw physical resources, such as wood, iron ore, aluminum and cotton support the world's population?

Everything you see around you is made of tiny particles called *atoms*. There are many different types of atoms, each with a special combination of protons, neutrons and electrons. These different types of

³⁹ http://www.redorbit.com/news/science/1637594/research_highlights_potential_for_improved_solar_cells/

⁴⁰ "U.S. National Renewable Energy Laboratory". February 6th 2007

⁴¹ http://www.stanford.edu/group/efmh/winds/global_winds.html

⁴² <http://www.bwea.com/marine/resource.html>

⁴³ *Future Energy Solutions* / IEA report, 2003

⁴⁴ *World Consumption of Primary Energy by Energy Type and Selected Country Groups, 1980-2004*, Energy Information Administration, U.S. Department of Energy

atoms are called *elements*. There are currently 118 elements of the periodic table[♦], with 92 naturally available in our world (the other 26 are synthetically made) and these elements basically comprise everything around us. The *Metals* category of elements are the most important, for they only melt at relatively high temperatures; their shape can be easily changed into thin wires or sheets without breaking, and heat and electricity travel easily through them. This makes them very useful for product creation/industrial application. These metals can be found in the earth's crust and in the oceans, either in their pure form, or more commonly, extracted from *minerals*. Global Mineral Reserves are currently measured by commercial output production. Sadly, this does not give a clear picture of what is available. While some elements/minerals are vast in abundance, such as Silicon, Aluminum and Iron, others are seemingly growing scarce, such as copper, lead, zinc, gold, and silver.⁴⁵ As far as this author knows, there has never been a complete geological survey of the earth's minerals/elements, only regional ones. This must be done in the future.

Now, all in all, there are basically 3 components to understanding the carrying capacity of the earth.

- (a) Knowing exactly what the earth has as far as component elements/materials
- (b) Where technology is in regard to creating synthetic substitutions for certain elements/materials.
- (c) How society organizes/manages its use of these elements/materials.

(a) We must have a full survey of all the planetary resources. This will give us key information on how to proceed with our operations. For example, if we have an acre of land that we want to grow food with, the first thing would be to test the soil to understand what type of properties it has. This information would have a direct relationship to what can be grown. This would be the "carrying capacity" of that land, so to speak. From a planetary perspective, this is critical information that has a direct effect on our decision-making.

(b) The difference between today and the past is our increased creative ability, through the scientific method, to solve problems. In regard to scarce materials, finding *substitutions* is an important field. For example, diamonds have long been considered a highly valued, scarce resource. One application of this strong mineral is as a precision machine-cutting tool. However, now, with the advent of *synthetic* diamonds grown in a lab, these tools do not require the expensive original. Many industrial materials today now have synthetic counterparts and this medium of scientific problem solving is very active. *In fact, the scarcity of any raw material is only as relevant as the amount of work being invested into finding a substitute or workaround.*

[♦] The periodic table is an arrangement of the chemical elements according to atomic number as based on the periodic law.

⁴⁵ <http://www.britannica.com/EBchecked/topic/383726/mineral-deposit/82165/Geochemically-abundant-and-scarce-metals>

(c) More important than substitutes and workarounds is the very nature of our usage of the planetary resources. *This is really the most important point in the debate regarding the carrying capacity of the earth.* As noted before, the world's people function within a monetary system *that rewards scarcity, planned obsolescence, waste, pollution and multiplicity.*

Production output in the world today is staggering compared to the past. With the use of technology, we are able to produce more with far less people, faster than in any other time in history. However, due to the profit system, there are tons of manufacturers producing the same things, as they compete for market share.

Their items are inherently inferior from the moment they are made, for the producer has limited the quality of the materials they use to cut down on their costs. Since it is a competitive system, the waste is staggering, with precious raw materials being used over and over again in inferior products that end up in landfills. Also, the manipulation of the public by industry into wanting non-utility, vanity based items, has compounded the waste. Remember, the monetary system can only work if there is 'cyclical consumption'. This leads to resource abuse.

The true cause of scarcity on the planet has less to do with the available resources, and more to do with our wasteful and exploitative modes of conduct. Virtually no regard is given to conservation or strategic use until it is too late. In a sane society, the raw materials of the planet would be accessed, industry would be organized as a whole to produce *in relationship* to what was available, and each item produced would be designed to last as long as possible, causing reduced industrial output and hence resource preservation.

(3) Now, when it comes to food production and water preservation, the same monetary system problems of pollution, cost cutting processes and scarcity come into play. (Minimizing waste lowers profits. If one has to reprocess waste rather than dump it, this is more costly.)

Water covers 70% of the earth's surface. Technological advancements such as *Desalination* processes can make fresh water both from seawater and from challenging brackish sources using reverse osmosis. This is yet another example of how technology is just as much a part of resource management as resources themselves. The idea that usable water is scarce is true only in relationship to the limited methods we are currently using, coupled with industrial pollution that goes on daily.

Food production is also expanding within the technological spectrum, creating vast new methods of cultivation. For instance, the earth's surface is indeed being abused, with its precious topsoil[♦] being

[♦] Topsoil is the upper, outermost layer of soil, usually the top 2 to 8 inches. It has the highest concentration of organic matter and microorganisms and is where most of the Earth's biological soil activity occurs. Plants generally concentrate their roots in and obtain most of their nutrients from this layer.

corrupted by indifferent agricultural methods. According to some reports, we are losing topsoil at a rate of 1% a year while the National Academy of Sciences has determined that cropland in the U.S. is being eroded at least 10 times faster than the time it takes for lost soil to be replaced.⁴⁶

Fortunately, scientists have devised a new form of *soil less* agriculture, called “Hydroponics”. This powerful new medium leaves a sea of options for the human population, not only in compensating for the damage we have caused, but also by expanding the possibility of when and where food can be grown. With hydroponic agriculture, we could theoretically grow food in the middle of the desert with proper irrigation or by tapping down to the water table.

Other untapped food production possibilities include suspended multi deck underwater ocean farms as well as *air plants*.

The bottom line is that food production is only as scarce as we decide it is. If we choose to become intelligent and strategic with our production methods, while preserving the environment and taking full advantage of scientific inventions that maximize our food production capacities, reducing wasteful and inefficient methods, healthy food can be as abundant as water itself. The starving children of the world are not so because of a lack of available food. It is their lack of purchasing power, not true scarcity, which causes the needless deaths of millions a year.

Summary of Chapter 3:

The dynamic equilibrium of planet earth in relationship to the human species is not a rigid system. It is up to us to keep things in balance through the intelligent management of the earth’s resources. If this is done correctly, there is no evidence to support that we cannot have abundance for all.

The three attributes of management are 1) Knowing the raw materials available 2) proactively working to overcome any deficiency through strategic substitutions 3) Using technology in all facets in order to maximize high quality production, minimize environmental impact and overcome problems in general.

Nature has its own laws and it is in our best interest to acknowledge them and align our behavior accordingly. We must be prepared to find out that what we think to be true today will be updated tomorrow. This is the *emergent* nature of knowledge. We learn from our mistakes. All errors are really gifts, for they can bring us to a higher level of understanding. The Scientific Method, with its basis of logical thought, evidence and testable proof, is the guiding philosophy that has solved problems and improved humanity’s quality of life.

Chapter 4: The Means For Social Evolution

⁴⁶ http://seattlepi.nwsourc.com/local/348200_dirt22.html

What do we want? How are we going to get there? What tools are required?

Our *Values* consist of what we find important; our goals; what we care about; what we hold sacred and what we want out of life. Values are not immutable and eternal, yet values pushed upon a person at a young age often have a strong power to perpetuate. Traditional indoctrination, such as nationalistic or religious beliefs, can become pillars of a person's identity and are difficult to overcome emotionally. The fact is, human values come from the environment. If you were to take a child at birth from a white middle class American family and place him/her in the Middle East with an Arab, Islamic family, that child would most probably grow up speaking Arabic and become a Muslim, holding those traditional values that would have been taught by the family and social culture.

Most of our traditional values were actually set in motion a long time ago. For instance, the Bible says " You shall earn your living by the sweat of your brow". What if society didn't need you to work for money? How could that value hold true? The fact is, values become outdated, just like knowledge and everything else. With respect to the current findings of science, most of the values of society seem to be out of date by thousands of years.

That being said, let's now stop for a moment and decide what our valued *goals* are, both personally and socially. The Zeitgeist Movement, along with The Venus Project, has a set of social values and hence goals, which we feel are critical to the sustainability of the species.

Goals

-Clean air and water, nutritious food, material abundance, fast, clean, and efficient transportation, relevant education, public health care, the end of war, personal liberty, an environment that enables us to constantly improve our abilities, human extensionality, reduced stress, and reduced crime.

These social goals are far from complex or irrational. In fact, many will find that both religious and secular philosophers have been poetically attempting to address these hopes for millennia.

Method

Now, with our basic goals denoted, we must then think about the *methods* to be used in order to accomplish those goals. Unequivocally, *The Scientific Method* is the most powerful tool we know. Observation, Logic and Testing, have long since trumped superstition, intuition and metaphysics.

In the words of Karl Pearson:

"There is no shortcut to truth, no way to gain knowledge of the universe except through the gateway of the scientific method."⁴⁷

The intelligent use of the methods of science is what has brought us everything that helps us in our

⁴⁷ Pearson, Karl, *The Grammar of Science*, 1911 p.17

daily lives. The application of science to social organization as a whole is the next step in our evolution. (Please see chapter 3 for more elaboration on scientific methodology)

Tools

The material tools that we need to accomplish our goals come from the humane use of *Technology*. From a simple hammer, to a high tech, fully automated production plant, technological invention continues to ease production methods, while also consistently making what was once deemed impossible, possible.

The history of technology is showing tremendous, accelerating development. Coupled with the scientific method of thought, the technological tools currently at our disposal have the ability to dramatically change humanity in ways most would find too fantastic to be true. If you explained a cell phone to a man from the 12th century, he would probably be shocked beyond comprehension at the “magical” instrument.

One characteristic of technology is its ability to constantly defy what is considered possible.

In the words of Dr. George Gallup:

”At every point in history, man has assumed that civilization has reached its zenith. He has smugly refused to place himself on the scale of time that reaches thousands and millions of years into the future as well as into the past. Looked at from the vantage point of 8,000 years hence - approximately the period of recorded history - man’s progress up to the present time may appear far less impressive than it does today.”⁴⁸

In the early 20th century, most scientists theoretically agreed that the airplane was probably impossible. However, the Wright Brothers were too busy bolting a gas engine to some wings in their bicycle shop to care about erroneous opinions. Soon after, they defied the authorities and invented the once considered impossible – “flying machine”.

The fact is, when a scientist tells you something is possible, he is likely correct. However, when he states something is impossible, he is likely wrong. Science and technology have continued to defy prior assumptions of possibility, and will continue to do so. It can safely be assumed that whatever the future holds from a technological standpoint, it will likely seem impossible and “ridiculous” from the standpoint of today’s understandings and methods.

Process:

Now, coming back to our larger point, the three attributes of personal and social evolution are thus:

Our **GOALS** – the **METHOD** of thought – and the **TOOLS** to get it done

⁴⁸ Gallup, George, *The Miracle Ahead*, New York Evanston and London, Harper and Row, 1964, p.ix

We define our goals based on what we value, we utilize The Scientific Method to solve problems and to create/test hypothesis, and we harness technology to make the goal a reality.

It is important to point out that this generalization is not linear and each part has an influence on all other parts. For instance, our values are often altered by advents in technology, along with the logical reasoning of the scientific method. If a person is brought up with a value system of “helping the poor” and then finds him or herself in an environment where no poor exist, possibly due to technological advancement, this value would have no basis to exist.

In the end, our ever-changing values are the most important attribute affecting our social evolution. The only relevant values are those that work to *improve* society and those that *hinder* its development.

Summary of Chapter 4:

Our approach to social evolution begins with our values. Our values are combinations of personal reflections on our acquired knowledge, coupled with the traditionalized, cultural indoctrinations we are born into. As time moves forward, our values change. Sadly, most of the values people have today come from a social system that is largely out of date in terms of its relationship to modern science and technology.

The process of accomplishment consists of: knowing what we want (Goals), thinking about the material in the most effective and hence, scientific way (Method), and using our most effective technological instruments to make that goal become a reality (Tools).

The valued goals of The Zeitgeist Movement and hence The Venus Project, are to redesign society for the benefit of all humanity, making sure there is enough of everything for everyone, maximizing personal freedom and happiness, while constantly reducing offensive social behavior, or crime. These values can only be accomplished using the intelligent and humane methods of science and the tools of technology. In the next section, we will show how.

- Part 3: A Resource Based Economy -

Chapter 5:

Social Cybernation

”We call for a straightforward redesign of our culture, in which the age-old inadequacies of war, poverty, hunger, debt and unnecessary human suffering are viewed not only as avoidable, but also as totally

unacceptable. Anything less simply results in a continuation of the same catalog of problems inherent in the present system.”⁴⁹ – Jacque Fresco

The time has come for a restructuring of our world society. The cause of this need is not some creative interest or intellectual ambition. The cause is the failing monetary structure, increasing world poverty and conflict, the constant corruption generated by the pursuit of profit and the continual poisoning of the planet and ourselves by the commercial industry at large. We stand at the crossroads. Either we take responsibility for our lives and for society itself, or we pay the price. The more we continue within this outdated system, the more unstable things are going to become.

The Venus Project

In this section, we are going to discuss The Venus Project. The Venus Project, which constitutes the life long work of social engineer and structural designer Jacque Fresco, is an organization that wants nothing less than a peaceful and sustainable global civilization. It seeks to update society to present day knowledge and modern methods. Its tenets are essentially based on the application of Science and Technology for human and social concern. The social structure it advocates is called a **Resource-Based Economy**.

A *Resource-Based Economy* utilizes existing resources rather than commerce. All goods and services are available without the use of currency, credit, barter or any form of debt or servitude.

The aim of this new social design is to *free humanity* from the repetitive, mundane and arbitrary occupational roles which hold no *true relevance* for social development, while encouraging a new incentive system that is focused on self-fulfillment, education, social awareness and creativity, as opposed to the shallow and self-centered goals of wealth, property and power which are dominant today. The Venus Project recognizes that the earth is *abundant with resources*, and that our outdated methods of rationing resources through monetary control are no longer relevant. In fact, they are very *counterproductive* to our survival. The monetary system was created thousands of years ago during periods of great scarcity. Its initial purpose was contrived as a method of distributing goods and services based on labor contributions. It is not *at all* related to our true capacity to produce goods and services on this planet.

As was discussed in Chapter 2, advancing technology is now phasing out the role of humans in the economic labor force. This paradigm shift is going to alter society one way or another. It will either lead us unto a new social system which does not require human servitude for income; where society is designed as a whole to *benefit itself* with the use of advanced technology being purposefully accelerated for social betterment... or we will likely be led down the path of chaos and disorder,

⁴⁹ Fresco, Jacque, *The Best That Money Can't Buy: Beyond Politics, Poverty and War*, Global Cybervisions, FL, 2002, p.x

where unemployment is rampant, crime is epidemic, draconian police state measures are introduced to suppress dissent and environmental resources become more exploited and destroyed.

Physical survival and quality of life are based solely on our use, management and preservation of the earth's resources. Now, with our ever-growing scientific ingenuity to utilize those resources in the most humane, technologically constructive and efficient ways, the tradition of labor for money and money for resources no longer has a logical basis. The *intelligent management of the earth's resources* is what is important. In a saner world, we would take account of the dynamic equilibrium within our global ecosystem, and adjust our production process accordingly.

Furthermore, a Resource-Based Economy would need to be global by nature, for the ultimate utilization of the planet is an organization worldwide. The planet can *only* be diligently examined and operated from a holistic perspective. This isn't subjective. The Earth is essentially a tool kit, full of possibilities for us to create an abundance of technology, food and energy. If we do not keep track of *all* planetary resources and view the planet as a synergistic whole, our abilities will be limited. Sadly, the world today is divided by profit oriented commercial competition, religious groups, and primitive nationalistic ego identifications, making it currently difficult to organize a global resource management system. This is another reason why the monetary system, in and of itself, is detrimental to our survival, for it inherently limits cooperation amongst *tribes*. As far as ideologies, it is time we put aside our religious and nationalistic differences and realize that *we are all here on the same planet, needing the same basic things*. It is only when the world *works together* that sustainability and true progress will be achieved. More on this problem of ideological division will be discussed in Chapter 7.

Industry and Labor

Again, as expressed previously, statistics have shown that human beings are increasingly being replaced by automated machines in the workforce, causing unemployment and hence a reduction in the purchasing power of its citizenry. Over time, as this phenomenon progresses, a tipping point will occur when the lack of consumer purchasing power will destroy the monetary based economy, for it won't matter how cost effective the production companies are... *people will simply not have any money to buy the items with*, thus ending the mechanism of 'cyclical consumption'.

Those who are aware of this, often attempt to create solutions *within* the monetary system, usually suggesting some form of 'hyper-welfare socialist state', where the rich elite own the factories, a virtually non-existent middle class (perhaps 5% of the world's population) works to oversee the machine operations, while the rest of the world is given money to use, in the form of hand outs from the government. This type of idea is nothing but horrifying and absurd. It would lead to dictatorship, extreme liberty restrictions and great public anger, for the *stratification of class* is still there, giving those at the top access to more resources than the billions at the bottom.

Consequently, we are now seeing a deliberate stifling and withholding of technological development for the sake of keeping people employed. It is like having an electronic drill available on a job, but instead you use a manual drill because you want to get paid for more hours. This is fundamentally counterproductive. It is nothing but insanity to slow/ignore technological development in order to preserve an outdated social system. **The entire point of technology is to free humanity from labor itself!** We need a social design that focuses on maximizing our technological abilities for the sake of freeing humanity from drudgery and increasing productivity to its highest potential. Anything less is unacceptable.

Now, for the sake of argument, let's completely forget about our current monetary based social system and take a fresh look at modern industrial production methods, as would be implemented in a Resource-Based Economy. The question is *how would we design a production system that maximizes high quality output, reduces waste, considers the dynamic equilibrium of the biosphere, and reduces repetitive and mechanical human labor?*

Based on The Scientific Method, here is how the logical reasoning for industrial production methods would unfold:

Step 1: Survey the planetary resources.

Step 2: Decide on what needs to be produced, oriented by priority ranging from bare necessities (such a food, water, shelter, etc.) to utility based production items (raw materials, automated machines, technological development, etc.) to production items used for non-utility based purposes. (Entertainment Media, Radios, Musical Instruments, etc.)

Step 3: Optimization of production methods | maximizing product lifespan.

Step 4: Distribution methods for human access.

Step 5: Optimized recycling of those products that eventually become obsolete or inoperable.

Step 1: *Survey the planetary resources.*

As discussed in the last chapter, it is critical that we know what we have on this planet, for that translates into what the possibilities are. With this information, industrial production is always adjusted to compensate for any emerging scarcity, along with the most mathematically appropriate raw material distribution, based on availability and its most relevant application. Any scarce resource is immediately addressed by seeking alternatives and substitutes. *This awareness can be obtained by real-time electronic feedback coming from all resource sectors of the planet, fed into a central computer database that monitors any growing scarcity or problem.* This idea of world resource monitoring is not far fetched, even if it might sound complex. In fact, the US military and Pentagon already have satellites and ocean monitors for the purpose of defense. These instruments could simply be reoriented for the purpose of environmental monitoring rather than human monitoring.

Step 2: *Decide on what production is required.*

What do we need? This is a very powerful question, for, besides food, water and shelter, most on the planet today have no idea what they *really* want or need, for they have never been informed as to the true state of technology. What we *think* we need is a direct result of the state of society's awareness of technological development. For instance, a person 300 years ago might need a needle and thread to fix a torn shirt. Today, they would think they need an electronic sewing machine...yet.... more accurately, what they *really* need is a kind of shirt material that doesn't tear easily or at all. Someone who has dust in his or her home would think, "I need a vacuum cleaner". Are they sure? Perhaps what they actually need is a household pressure system that does not enable dust to enter or is equipped with electrostatic air filters that eliminate what little dust there is and destroys air borne bacteria. In other words, if we critically examine what we *think* we need in a material sense, we can begin to see that needs are always in transition. Science and technology are barometers of utilitarian human need, and therefore all products that are created should be as advanced as is technologically possible. Our current monetary system, which generates wasteful, outdated products constantly just to keep industry and the economy going, does not have the ability or the desire to produce the most advanced tools for our use. This is because the majority of the products produced would not even exist if industry focused on what would best serve the needs of society.

Step 3: *Optimization of production methods / maximizing product lifespan.*

If I was going to build a desk for myself, I would try to make sure that desk would last as long as possible. This makes sense, right? If the desk breaks, that means I would have to build another one, at the cost of more materials and more labor. It would seem logical that everything produced in society would have the longest possible life span that is technically possible.

Sadly, the exact opposite occurs in our current system, for, as previously discussed, the current monetary system thrives on *multiplicity* and *planned obsolescence*. Without it, the whole economy would collapse. This mechanism of the monetary system is nothing but detrimental. **How anyone can sit back and defend the Monetary System's propensity for waste is horrifying.** In a saner world, we will make things that *last*.

The optimization of production methods is about using the most powerful materials and methods, while outputting the most long lasting and effective products. Human labor is not only currently being replaced by machines because it is more cost effective within the profit system, machine labor is exceedingly *better than human labor*, and output statistics have shown this continually - Industrial productivity increases when machine labor replaces human labor. This, of course, should be no surprise, for a machine does not get tired and it is always more accurate and consistent than a human, mechanically. High-efficiency labor automation, coupled with scientifically managed

resources (as denoted in chapter 3) will allow for a fluid, scarcity-less environment which could be operated by only a very small fraction of the population.

Step 4: Distribution methods for human access.

Distribution methods would also depend on the state of technology. For instance, production could eventually become so streamlined, that a product is only created when the request is made by a person in need. Regardless, warehouse like distribution centers, along with automated delivery would be the most simplistic way for now. Also, since there is no money used in this system, there is little need for a person to hoard their items. There is also no reason for a person to steal something that is available to everyone...and they certainly couldn't sell it.

In light of the fact that all goods in a Resource-Based Economy are *designed to last as long as possible*, the *consumer culture* values that exist today would also be outgrown. Not to mention the outgrowth of all of the other value distortions imposed by *advertising* today, which make people feel greedy, inferior or inept due to what they do and don't own. Advertising would not exist in this new system, outside of general product information available to people who think they might need it. To obtain a product, a person would likely go online, search for the item's function, select the item and request it. It would be available for pickup or delivery soon after.

Step 5: Optimized Recycling of the products that become outdated or inoperable.

This step actually begins at the production stage, for each product designed has had incorporated into it the consideration of recycling in advance. Ideally, everything produced would be sustainable and recyclable. This strategic consideration would ensure that obsolete products would be reused, reducing waste, to the maximum extent possible.

Now, one of the more difficult and confusing components for many to consider in regard to the above 5 steps for our Resource-Based Economy's new industrial production methodology, has to do with number 3 and the use of machines for replacing human labor in as many areas as possible. The question of, "Who will maintain the machines?" is common. This will be addressed in a moment.

However, let's briefly review the history and application of machine automation and computer technology.

The first major automated robot, the Unimate from Unimation Inc., had a work envelope of 350 cubic feet. It occupied 20 square feet of floor space. The Unimate was deployed for the first time in 1961 at the General Motors Corporation plant in Trenton, New Jersey, where it unloaded a die-casting machine. Six years later, GM was using the Unimate for spot welding and attaching clips to seat frames. In 1970, the automaker built the first automated spot welding line, consisting of 28

robots.⁵⁰

Those who were in the business of making these machines knew exactly what the implications were. In 1962, John Snyder, the president of U. S. Industries, Inc., a manufacturer of automated equipment, set up the "Foundation on Automation and Employment" to try to "develop ways to ease automation's impact on displaced workers." He once stated:

"I want to sell the automation machines that my company makes, but if our economy turns sour, if the unemployment problem is not solved, I will have difficulty selling them and no reason to make them. To my way of thinking, all businessmen should share this view—that the unemployment problem and the automation problem are as serious for business as for labor."⁵¹

In 1946, the first general-purpose electronic computer was developed- called ENIAC. This computer has 18,000 radio tubes, took up 680 square feet and weighed more than 30 tons.⁵² Penn professor Irving Brainerd once speculated that during the 80,223 hours ENIAC operated, it crunched more calculations than had been performed by all humanity since time began.⁵³

*Now, a computer chip measuring 0.02 inches (0.5 mm) square has the same performance power as the ENIAC.*⁵⁴

Now, *machinery* today is being combined with *computerization*. Essentially, the computer is the brain of the machine and instructs the machine in terms of what it is to do. This combination of machine and computer intelligence could be termed: *Cybernation*. Cybernated machines today are probably the most powerful and influential inventions humanity has ever created. The possibilities of these tools are on pace to change the entire fabric of society...beginning first with the freeing of the human labor force.

In the words of Albert Einstein:

"Ultimate automation...will make our modern industry as primitive and outdated as the stone age man looks to us today."⁵⁵

This reality is not something we should fight. We should embrace it emphatically. Cybernation is the *Emancipation Proclamation* for human kind, freeing us from the drudgery of common labor, opening new horizons for human potential and exploration.

⁵⁰ Sprovieri, John , *50 Years of Assembly: Robots to Change the Future—Again*

http://www.assemblymag.com/Articles/Column/BNP_GUID_9-5-2006_A_1000000000000127612

⁵¹ Rodden, Robert G., *The Fighting Machinists, a Century of Struggle*. <http://www.iamaw lodge1426.org/hisupdate63.htm>

⁵² <http://en.wikipedia.org/wiki/ENIAC>

⁵³ Kanellos, Michael, *ENIAC--Monster and Marvel*, http://news.cnet.com/2009-1006_3-6037980.html

⁵⁴ <http://en.wikipedia.org/wiki/ENIAC>

⁵⁵ Fresco and Keyes, *Looking Forward*, Barnes, 1969, p. 72

In the words of Dr. Norbert Wiener, noted “Father of Cybernation”:

”It is a degradation to human beings to chain them to an oar and use them as a source of power, but it is almost an equal degradation to assign them to purely repetitive tasks in a factory which demands less than a millionth of their brain power.”⁵⁶

These Cybernated Machines far exceed the physical accuracy of a human being, while also being able to compute at incredible rates, also far exceeding the computational speed and capacity of the human brain. Now, for those who have been indoctrinated by science fiction to think that these new machines might gain “consciousness” and “take over the human race”, it should be understood that this has zero basis in reality. Cybernated Machines are nothing more than creative extensions of human performance. Just as a hammer will help you drive a nail into a strip of wood, a Cybernated Machine will perform complex tasks easing the process to obtain a particular goal. The machines do as they are programmed, and nothing more.

In the words of Arthur C. Clarke:

”The popular idea, fostered by comic strips and the cheaper forms of science fiction, that intelligent machines must be malevolent entities hostile to man, is so absurd that it is hardly worth wasting energy to refute it. I am almost tempted to argue that only unintelligent machines can be malevolent...Those who picture machines as active enemies are merely projecting their own aggressive[ness]. The higher the intelligence, the greater the degree of co-operativeness. If there is ever a war between men and machines, it is easy to guess who will start it.”⁵⁷

Now, a very common reaction to the idea of machines taking over the role of human labor is to distrust the idea due to our daily problems with technology today. From cars breaking down, to personal computers freezing, society today seems to have a love-hate relationship with technology. Well, first of all, as denoted before, in a monetary system *everything* produced is designed to break down, for everything is a product. Even NASA with its extreme need for the best materials and technology has a budget to deal with, and must cut corners if need be. Your cars and personal computers don’t stand a chance. Both industries have a massive sub-industry for repairs and maintenance. If computers and cars were not designed to break down, tens of millions of jobs would be lost worldwide in these sectors alone.

Ultimately, the first step towards ensuring that the Cybernated Machines we devise are made of the highest quality components and programming would require that we outgrow the monetary system, for it prevents their efficiency and sustainability. There is no reason why everything in your home, from your refrigerator to your stove, to your television, to your computer, could not last your entire lifetime without physical repair. How can that be said with confidence? Because the best materials

⁵⁶ Fresco, Jacque, *The Best That Money Can't Buy*, Global Cybervisions, 2002, p. 54

⁵⁷ Clarke, Arthur C., *Profiles of the Future*, NY Harper & Row, 1964, pp.226-227

available on this planet, such as Titanium, have sustainable properties that far exceed the life span of a person by thousands of years. Products made today are made out of the cheapest possible materials in order to increase profit margins. Today you will find that most general products in the consumer industry are created in whole, or in part, out of *plastic*. Plastic is one of the cheapest synthetic materials available. It has no heat tolerance, is often too brittle and it weathers very quickly – so, of course, everything breaks down... that is the intent.

In a saner world, this would not be tolerated and the industrial machines devised would not only have extreme durability and long life spans, the advanced machines will eventually be able to *repair themselves*.

In cars today, there are often warning lights on the dashboard that will alert you to a problem with a particular part of the car. This idea can be expanded to all machinery to the degree where not only is the machine's on board computer 'aware' of a problem, supplemental machines can thereby be directed to replace the broken part in real time. Even more advanced, are material technologies such as 'shape memory alloys'. These metals can literally *remember* their shape. In the event that a machine's physical structure becomes damaged, an electronic current can be sent through that section, instantly correcting the structure. The bottom line here is that self-repairing machines and structures are growing realities. The problem is that the production of such efficiency is not rewarded in the monetary system, so most people in society have no idea of what is actually possible.

In the words of Thorstein Veblen:

"If the country's productive industry were completely organized as a systematic whole, and was then managed by competent technicians...to maximize production of goods and services instead of, as now, being mishandled by ignorant businessmen...to maximize profits, the resulting output of goods and services would doubtless exceed the current output of goods and services by several hundred percent."⁵⁸

Now, the role humans will play within the high-tech, cybernetic, automated industrial production plant of the future will be that of *supervisors* and nothing more.

Once the Cybernated Industrial System is set up, it is simply a matter of updating the system and making sure the system is in order. As time moves forward, we can only expect that the rate of our technological capabilities will continue to increase.

But what about complex jobs, such as doctors, architects and the like?

We have to ask ourselves, "What is the true nature of our occupational roles?"

⁵⁸ Veblen, Thorstein, *The Engineers and the Price System*, NY B.W. Huebsch, 1921, pp.120-121

What *exactly* is a doctor, a carpenter, a plumber, an architect, or the like actually *doing* in their work?

They recognize and react to observed patterns.

When a doctor examines you, all he or she is doing is referencing what he or she has learned. If you go to a dermatologist because you think you might have cancer on your arm, the doctor examines the skin and mentally references the patterns he or she has been taught. Then he or she might take a sample of the skin to be tested by machine analysis. It is a 'technical' process. There is no reason why an optical scanner could not be invented that can scan your arm and immediately understand what the condition might be. A modern programmed computer with optical technology is not limited by the spectrum of the human eye; it has a memory and processing capacity that far exceed a human's. Even surgery, as sensitive as it may seem to us today, is a purely technical process. It is simply a matter of time before extremely advanced machines replace surgeons. It is already beginning to happen in certain areas.

The same goes for every other utilitarian occupation in existence. A 'carpenter' is a person who is hired to fix or create a certain kind of structure. While there might be so called "creative" elements to the carpenter's ways, he is still basing his decisions on physics, geometry and modern materials. If you want to build a deck, the first thing you need to know is the *best available materials* to use and then apply the *highest integrity methodology* to those materials. Those understandings are completely technical and without the need for human opinion. And this brings us to a very critical realization... one that will have a profound effect on our progress on this planet:

The delegation of decision making to computers is the next step.

The utilitarian roles that humans assume in society today are fundamentally technical by nature. This seems obvious in regard to *physical labor*, for we have already seen machines replace the role of humans in areas such as factories and construction. However, unrecognized by most, our *mental labor* is now being delegated to computers as well. If this sounds foreign to you, please note that if you have ever used a *calculator*, you have delegated your decision making to a machine.

We must remember that *logical reasoning*, which is our cognitive ability to think out solutions to problems from a *cause and effect* standpoint, is entirely a technical process, based on the amount of information we have at any one time. For example, if we have a problem with our car, we would go to a mechanic and he would use his *pattern recognition* abilities and *associative memory* to consider the possibilities that might have caused the problem, along with the possibilities for solving the problem, based on reasoning. *It is an objective, technical process.*

However, a mechanic's human brain is only capable of a certain amount of memory and intellectual

processing power. A modern, programmed machine on the other hand, can store tremendously more data than a human, and can consistently and rapidly process information without getting tired or lazy. For instance, let's assume we have programmed a computer with the data set consisting of the car in question. A computer has been programmed to know every component, every screw and every electronic pathway, etc., of that vehicle. It has also been programmed with the application of physics so it can relate to the actual *cause and effect* functionality and operation of the machine, not just its parts. When the car is taken in for repair, the mechanic recognizes the physical properties as best he can, and then he goes over to this computer, selects the model of the car and inputs a description of the problem. He might input, "left headlight not working". The computer would then immediately present a list of all relevant issues related to the headlight, and then present a series of framed questions to the mechanic that most logically attempt to locate the cause. The computer might say: "Check the connection of cable 15b", and then show a diagram of where that component is located in the car. If the mechanic finds that isn't the problem, he inputs that new information into the computer and the computer goes to the next logical possibility. The computer is really making the decisions... the mechanic is just orienting its focus.

The bottom line here is that there really is no area of human operation that cannot be highly perfected by delegating decision-making processes to computer intelligence. In fact, the only thing that now separates us from machines on a cognitive, utilitarian level is our ability to *create complex associations* in our mind. No computer today has yet to respond effectively to being "asked a complex question" in the English language. It requires that the language be transformed into one that it is programmed to understand, such as mathematics.

However, new fields, such as 'Artificial Intelligence', (AI) are beginning to grow with incredible possibilities for this kind of "awareness". In time, computers will be able to achieve complex thought processes that were formerly only attributed to humans. There is no evidence to support the contrary.

In the next section we will describe how this new human option to delegate our labor and decision making to a highly efficient computerized system is what will constitute the replacement of the institution of traditional "Government".

Government:

"[The] tremendous and still accelerating development of science and technology has not been accompanied by an equal development in social, economic, and political patterns...We are now...only beginning to explore the potentialities which it offers for developments in our culture outside technology, particularly in the social, political and economic fields. It is safe to predict that...such social inventions as modern-type Capitalism, Fascism, and Communism will be regarded as primitive experiments directed toward the adjustment of modern society to modern methods"⁵⁹ – Dr. Ralph Linton

⁵⁹ Linton, Ralph, *The Tree of Culture* (New York: Alfred A. Knopf, 1959, pp 47-8)

First of all, *Government*, as we know it, *is a byproduct of environmental scarcity*. Like mafia tribes, the governments of the world seek to preserve their current positions of power, while aggressively working to strengthen their economic advantage. As far as social management, all a government can basically do is make *laws*, establish *budgets*, and *declare wars*. They are really monetary system creations. Sadly, due to the very nature of their power, history has become one constant chain of governmental corruption, ranging from the genocidal slaughter of peoples in opposing nations, to the deliberate oppression of a country's own people in order to maintain the established order. The reason why all governments on the planet are corrupt is because *they have to be in this system*. Remember, they are no different than corporations, trying to survive in the monetary system. They are all in competition with each other, with periodic "world empires" emerging every couple hundred years or so.

In order for any traditional government to keep control over its people, it must push a unified value system. If the leaders of a country want the public to support its wars, they will put statues of "great war heroes" in parks and have the media push the 'nobleness' of the military. They also very often cite "god" and allude to their wars as being some form of battle against "evil". This manipulation keeps an uninformed public on 'their side' with a narrow worldview. In the words of Albert Einstein: "Patriotism is a disease." For a person to say something like, "The USA is the best country on earth" is exactly the same as saying "White people are God's chosen race". Patriotism is racism with a flag... nothing more. The fact is, Government decisions today are based on the narrow self-interest of an elite, just like the corporations. This is nothing but destructive and unsustainable.

As stated before, the more we think about our problems on this planet, from the poverty in Africa, to the destruction of the Amazon Rainforest, **we see that every problem in life is actually *technical* by nature.**

Because of this, there is little reason for traditional *opinions* in the solving of any problem, for our technical insight can now *arrive* at most answers using The Scientific Method along with all known variables relative to the problem. If a person reads one page of a book and closes it, he or she can easily have an "opinion" on that book as a whole. If another reads the whole book, he or she might also have an opinion. Whose opinion would you value more? The person who read the full book, or the person who has only read one page?

In other words, the more information taken into account in the process of decision-making, the more accurate that decision will be. As discussed earlier, computerized machines now have the ability to perform better than humans in both physical and mental areas. Our minds do not technically compare to computers that can access trillions of bits of information across vast informational

databases, and compute output results near the speed of light. The transfer of decision making to machine intelligence is the next phase of social evolution. It greatly reduces human error, and removes dangerous biases, subjectivity and opinion.

Because of the limitations of the sensory and cortical equipment in our body and mind, no one can know everything in this world. Our senses are limited in range. Our eyes can only see a fraction of the electromagnetic field... therefore it is only logical that we delegate decision making to machines, for they do not have these restrictions. Computers, used as tools, can/will be able to solve problems, which humans simply cannot due to our physical and mental limitations. It is no different than a person who uses a pair of glasses to see. Glasses are a technological tool...an *extension* of the human being that helps a person see better than they would normally. Cybernated Machines are nothing different. They are simply extensional tools that expand our abilities. The human species has the powerful ability to improve itself through technological invention. We must realize this and maximize its potential.

In a Resource-Based Economy, *people do not make decisions; they arrive at them through the use of advanced technological tools that incorporate The Scientific Method.* There is no ‘Republican’ or ‘Liberal’ way to design an airplane... so why do we use these outdated worldviews in society today? When we recognize that society is a technological invention, with its component variables really no different than the component variables of an airplane, we then see that our orientation towards so called “government” should be purely scientific. ‘Politics’ is now outdated, for its processes are largely subjective and without scientific reference. Politics is an outgrowth of the monetary system and scarcity. We now must work towards a new, emerging paradigm – moving from a period where the central problem was the *sharing of scarcity*, to the problem now being one of *creating and distributing abundance*.

Government and the concept of the “State” will eventually be outgrown entirely and replaced by an objective system of global resource management and technological organization. In a system of abundance, the “State”, as we know it, has no basis to exist. Government also becomes a *Cybernated System*, which is combined with Industry and thus responsible for the production and distribution of goods, along with resource and environmental management. The structural basis for this “government” system is idealized as follows:

1) **A central database containing catalogs of every known material and technical understanding for problem solving and invention.** As noted previously, computers have the ability to catalog information and logically compute it on a scale much larger than a human can. Only computers will be able to handle the integration of *all known knowledge* and come up with decisions that will be logically based on the full known range of data. As stated before, the most efficient decisions are decisions that have been arrived at by taking into account all relevant variables. It is now within our

grasp today to begin the development of a *Central Computer Database* that contains all known knowledge, ranging from the properties, combinations and applications of every element on the periodic table, to the complete known history of technological invention. Once the associative system emerges, which will allow computers to contextually cross-relate all the known disciplines, *we will have in our grasp a tool of immeasurable proportions*. The limitations of our physical and cognitive abilities will no longer be a problem, for the new method of problem solving and invention will be an *interaction* with this database program. It could even come in the form of a simple website on the Internet, in fact. You would pose a problem or question to the database program and it will give the best feedback that is possible based on the current state of knowledge at that period in time. Again, this process of inquiry and interaction is no different than interfacing with a calculator, but this new “calculator” has a powerful associative system and an extensive database of knowledge that can not just understand and compute math, it can integrate physics, biology, astronomy and every scientific field into one concentrated awareness.

Most likely, the US Military already has similar database reference and decision making programs that it uses to strategize for war.

Regardless, in order for this system to be effective, it must also have real-time feedback input from the planet, in order to understand *what resources we have* and *what we don't*. This requires a worldwide sensory system. In other words:

2) An earth wide autonomic nervous system, with environmental sensors in all relevant areas of the planet, generating “Industrial Electronic Feedback” regarding resources, operations and other environmental issues. This nervous system is connected directly to the Central Database Program noted above. This holistic system keeps track of all the resources on the planet, while also monitoring the earth for environmental disturbances which humanity should be alerted to, such as earthquakes and other natural phenomenon. This database would include a survey of available resources, production plants, scientific and technical personnel, transportation, research labs, medical facilities, schools, etc. This will not happen overnight, but if we began by constructing regional systems and overtime interlink all of them globally, it could be created sooner than we think.

This integration can inform the Central Database Program of what is available and what is scarce, while the Database will in turn constantly adjust industrial methods based around the dynamic equilibrium of the planet. Of course, full international cooperation is the only way to accomplish such a system. This issue will be discussed in Chapter 9.

3) Interdisciplinary Teams of technicians oversee the system and orient research projects to continue growth, efficiency and social evolution. In an optimized version of this system, no more than 5% of the population would likely be needed to run the show. The more optimized and powerful our technology and methods become, the more that number decreases.

Of course, many people often ask, *what about democracy?* Is this system a democracy? How do I participate in the system? Do we elect the Interdisciplinary teams?

In a Resource-Based, Global Economy, where “industry” and “government” are combined into a Cybernated System that incorporates advanced problem solving database computers, coupled with vast planetary wide observation sensors, the traditional concepts of *politics, elections* and the like have no relevance or basis. While this notion scares a lot of traditionally minded people, it must be reiterated that *our problems in life are technical*, and nothing more.

Democracy in today’s world is an illusion. *It always was.* People think they have “choice” in our current system because they can press a button on a voting machine and put some *pre-selected* person into power. Once that person is in power, the public then has no power. Did you vote for the space program? Did you vote for the cabinet of the new president? Did you vote for the tax cut? Did you vote for where highways or power grids go? Did you vote for the war in Iraq? **No, you didn’t.** The traditional concept of a “participatory democracy” is a cruel joke. The game has been used to give the public the illusion of control for countless generations, while the distorted monetary powers at the top continue to do whatever they please. *There never was a true democracy in any country in history and there never will be as long as the monetary system is in operation and scarcity is perpetuated.*

So how would a person participate within a Resource-Based Economy?

First, they would interact with the Central Database System program, which would likely come in the form of an advanced Internet web page which *every* person has access to. They would then *input* their proposal. The Central Database, with its historical knowledge databases and full integration of all scientific fields, would then analyze the concept for its scientific and technical integrity along with optimizing the materials required based on current understandings and availabilities. If the proposal makes logical sense and the optimized resources to make it happen are available, it would be turned over to the Interdisciplinary Teams that oversee the implementation of the new proposal and orient it into the system.

These Interdisciplinary Teams would be selected and organized by the Central Database Program, based on what they have already contributed to the system. This is a true “election”, based on what a person has *done*, not what they *say they will do*.

Furthermore, the public’s fear of traditional “corruption” will have no basis, for there is no reward for it. *The Interdisciplinary Teams do not get “paid” in any way, for their worldviews have been expanded to realize that their reward is, in fact, the fruits of the society as a whole and they contribute because they want to!* While this might be difficult to consider for those who have been

fully indoctrinated into the monetary based reward system and feel that money is the only “incentive” there is, let it be known that every day, all over the world, millions of humans *volunteer* for the greater good. In a 1992 Gallop Poll, more than 50% of American adults (94 Million Americans) volunteered time for social causes, at an average of 4.2 hours a week, for a total of 20.5 billion hours a year!⁶⁰ This is an incredible triumph for the collective human spirit, for even with the sickness of self-interest generated by the monetary system, humans *still* strive to help each other and give to society without reward.

In the future, those who choose to work in the *Cybernated Industrial System* will do so because *it is an honor to serve humanity. They will understand that it is in their self-interest to see to it that humanity lives and works together for the greater good. The reward in a Resource-Based Economy would be the continual improvement of society for all.*

In the words of Margaret Mead:

” If you look closely you will see that almost anything that really matters to us, anything that embodies our deepest commitment to the way human life should be lived and cared for, depends on some form of volunteerism.”⁶¹

In a Resource-Based Economy, participation is open to everyone, because all issues are fundamentally recognized as technical. The degree to which a person contributes is based simply on that person’s education and ability to create and problem solve. *This is why expanded education is critical.* In society today, the public is always kept uninformed and as dumbed-down as possible. This way the government can maintain control. In a Resource-Based Economy, the goal of the educational system is to produce the most intelligent and aware human beings as possible. Why? Because everyone can then become a *contributor*, greatly affecting our social evolution for the better and improving the lives of all.

Summary of Chapter 5:

Who makes the decisions in a Resource-Based Economy? No one does. Decisions are arrived at by the use of The Scientific Method, utilizing computers that gain real-time feedback from the environment, along with a Central Historical Database of all known technical information, and maintained by evolving Interdisciplinary Teams. This combination could be called the Cybernated Industrial System. This reduces erroneous opinions and subjectivity. We don’t want people in control of government. We want to utilize Scientific Methods for arriving at more appropriate decisions. In the end, the only real issues for society in the natural world are (1) the production of goods and services that are equally available to all, (2) research projects and educational systems to expand our knowledge, understandings and applications, and (3) the constant monitoring of the earth’s resources

⁶⁰ Hodgkinson & Weitzman, *Giving and Volunteering in the United States: Findings from a National Survey*, 1992, p2

⁶¹ Krikorian, Robert “*Have you noticed...*”, *Vital Speeches of the day*, 1985, p 301

and atmosphere for feedback and possible environmental problems, enabling us to restore and maintain a pristine environment. Without the wasted energy and resources from going to war and other aspects of the monetary system, we could address true threats to humanity, such as unforeseen variables like tsunamis, earthquakes, illness and disease. **The only real problems in life are the problems that are common to all humans.**

Chapter 6: Cities that Think

Anthropologists often consider the *city* as our most fundamental social invention. The first known city is thought to have occurred about 5400 BCE in ancient Sumeria. Since then, we have seen vast technological evolution in the processes and materials used to create the components of a city, along with advanced integrations of 'social' conventions, such as electrical systems, water distribution methods and the like. However, today's cities, as modern as they may seem, are in fact extremely outdated in the face of modern technology and scientific ingenuity.

It is time that we fully harness a *systems approach* to our city designs. The term "systems" is derived from the Greek word "synistanai," which means, "to bring together or combine." A systems approach thus means that the 'elements' of the city, such as houses, power generators and production facilities, be intricately interconnected to the 'processes' of the cities, being waste disposal, irrigation, power distribution, goods and services production, etc.

In a Resource-Based Economy, the cities are designed to be extremely flexible, allowing for constant upgrades and changes. They are emergent, fully integrated systems designed to evolve like a living organism.

Jacque Fresco's innovative, multidimensional and circular city designs would use the most sophisticated resources and construction techniques. However, they require that we start fresh. Trying to fix our current cities is not worth the time, material and effort. It is much less problematic and effective to build newer cities from the ground up than to restore old ones. The design and development of these new cities emphasize the restoration and protection of the environment and efficiently apply resources with energy conservation, ease of fabrication, and relative freedom from maintenance. Many of the old, inefficient cities will be mined for resources, while others will be kept as museum cities.

The Circular City:



Model by Jacque Fresco | Photo by Roxanne Meadows

The circular city permits the most efficient use of resources, travel techniques, and general functionality, with a minimum expenditure of energy. The geometrically elegant circular arrangement is designed to allow for the highest standard of living in the most productive and efficient ways possible. These cities serve the role of *extensions* of human activity and utilitarian expression; in complete harmony with the environment. The configuration of these cities would be a direct representation of the function they serve.

For instance, the outermost perimeter of the city is for nature-oriented recreation, including lush gardens and parks for hiking, cycling, water sports and any other outdoor activity.

The next inner section is the 'agricultural belt', using outdoor and indoor (hydroponic) agricultural methods so food can be grown all year round.

Continuing in, eight green areas provide clean renewable energy sources for the entire city. While these energy sources would be region specific, often these methods will include Geothermal, Wind and Solar technologies, while those cities near water would extend to utilize Wave and Tidal power. The largest of these green areas is also the 'residential belt', containing unique homes and apartments. The residences are constructed by extrusion technology and other methods of high-tech prefabrication. The days of bricks and wood being stuck together are no more. Structures of the future can be near solid units, extruded as a whole. All homes and apartment complexes are also

virtually self-contained systems. For instance, the outer surfaces of the structures serve as photovoltaic generators, converting solar radiation directly into electricity. The homes are fire resistant, require little maintenance and are impervious to water and other environmental influences. The effects of floods, earthquakes and hurricanes are also considered and incorporated into the design, respective of the characteristics of the region of the earth employed.

Moving in past the residential district are education, science and research centers, along with production and distribution centers. Automated inventory systems would integrate the distribution centers and manufacturing facilities in a highly coordinated and efficient way. Without the problem of money and value, limits on production would not exist.

In the center of the city, there is a large dome that contains the *Central Cyberneted System*, which is the brain and nervous system of the entire city. As denoted earlier in our section on 'government', through satellites and sensors placed around the entire city, the core dome electronically monitors the production and distribution of products, while also controlling environmental factors within the system. For example, in regard to the agricultural belt, electronic probes monitor and maintain the soil conditions, including the water table, nutrient allocation and other attributes. This method of 'environmental feedback' is applied to the entire city complex. This way a 'balanced load economy' can be maintained, with overruns and waste eliminated.

Also, within this central dome is the central transportation hub...more on this in a moment.

Surrounding the central dome, are eight smaller domes that are used as culture centers, such a performance venues, conference centers, exhibitions and the like.

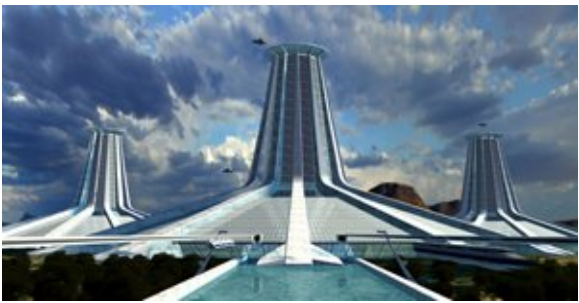
Waste recycling and other such needs are located beneath the surface of the city, always utilizing the most advanced methods in clean technology.

Apart from the Circular City, other city designs would include various '*land city*' configurations, '*total enclosure*' cities, along with '*Cities in the Sea*'. Colonization of the oceans is likely the next stage for humanity in order to relieve land based population pressures. Oceanic city communities will develop as artificial islands, floating structures and under sea observatories.



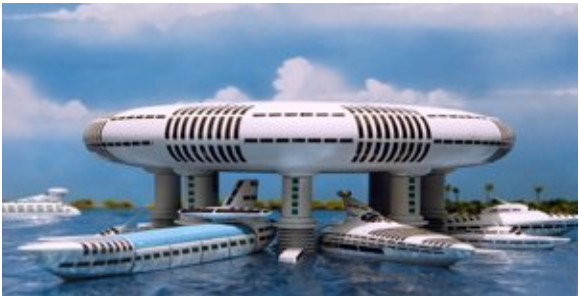
Model by Jacque Fresco & Roxanne Meadows

“Land City (Variation)”



Designed by Jacque Fresco, CG by Doug Drexler

“Enclosure City”



Model by Jacque Fresco, Photo by Roxanne Meadows

“Oceanic City”

The cities on earth, in whatever form they take, are all tightly interconnected within a worldwide system. Just as each city has a central organizational dome which functions as the *brain*, along with its *nervous system* consisting of computerized environmental monitoring via satellite and electronic probes, the larger *world complex* absorbs each city and monitors the broader spectrum of the environment, making sure there isn't a material resource needed in any of the individual cities, while also regulating larger order processes for all cities and the environment as a whole. This “government”, if that is what you want to call it, is where the *Central Database* is located, as denoted in the previous chapter, with its *nervous system* stretching into all city complexes and beyond.

Interconnected Circular Research Cities



Model by Jacque Fresco & Roxanne Meadows

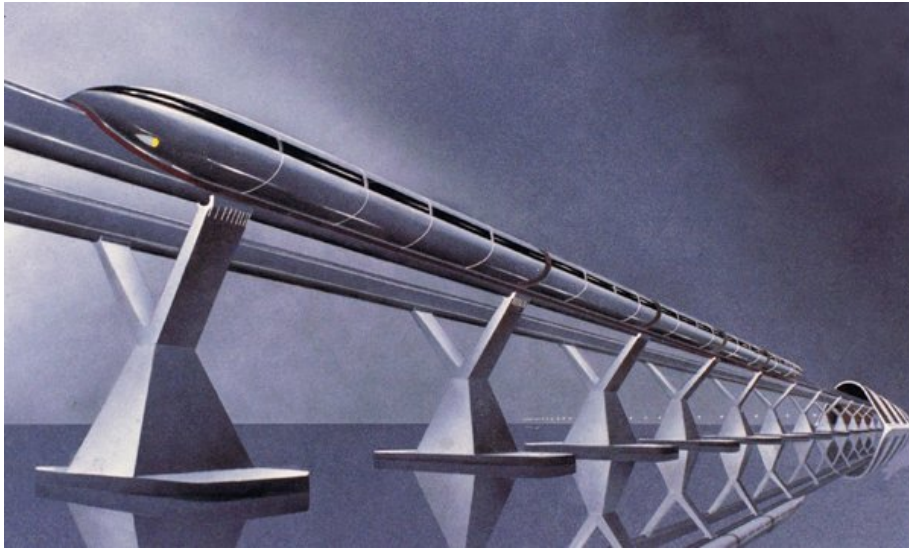
Transportation:

Within the city, escalators and elevators, along with conveyers and transveyors, move in all directions and are interconnected with all other transport systems. The transportation system is deliberately designed to reduce the need for any kind of automobile. This system can take you *anywhere* in the city. If you want to travel outside the city, monorails, streamlined cars, vertical take off/landing aircraft and Maglev trains are used for continental and intercontinental travel. Airports and International shipping systems are also implemented in and around the cities.

It is worth pointing out that the prevailing means of transportation in our societies today require fossil fuels to run. In the case of the automobile, the battery technology needed to power an electric car that can go over 100 miles an hour and over 200 miles on one charge currently exists, and has existed for many years. However, due to battery patents controlled by the oil industry, which limit their availability to maintain market share, coupled with the political pressure from the profit based energy industry, the accessibility and affordability of this technology is limited. There is absolutely no reason, other than pure, corrupt profit interest, that every single transport vehicle in the world could not be utterly clean, with zero need for gasoline.

As far as traditional airplanes are concerned, *Maglev technology* is on pace to making them obsolete. A Maglev train uses magnets for propulsion. It is fully suspended by a magnetic field, and requires less than 2% of the energy used for plane travel. The train has no wheels, so nothing can wear out. These tube based Maglevs could travel up to 4000 miles per hour, in a motionless, frictionless tube, which can go over land, or underwater. They are fast, clean, and efficient with only a fraction of the energy usage we use today for the same means.

Maglev Train



Designed by Jacque Fresco | Rendering by Roxanne Meadows

Lifestyle:

In our current system, the traditional family is broken, with both parents having to work in order to survive. Monetary economics undermines family cohesion and childcare. Stress is always high due to medical bills, insurance, education, employment insecurity and living costs. In a Resource-Based Economy the integrity of the family will be returned.

Likewise, the cultural values of society as a whole would also undergo profound change.

With the monetary system outgrown and the world working together to produce abundance for all the citizens of the planet, activities we appreciate will expand greatly, for the amount of human freedom would be unlike anything we know today.

Some often respond to these possibilities with the question: “What will people do?”

The answer is, of course, what you like to do. For many in our current society, options in life are very limited due to the scarcity conditioning perpetuated. Within the monetary system, the very idea of *freedom* is undermined, for a person is only as free and their purchasing power will allow them to be. This stifles the creative outlook of people and today many have an extremely limited frame of reference as to what is possible.

For example, if a woman in ancient times had the role of walking from her hut to a nearby creek to fetch water every day for cooking, she would likely feel a displaced sense of responsibility if suddenly there was a plumbing system in the house with a faucet that brought the water to her directly.

The fact is, advances in technology can actually change our values and it is important that we ‘update’ our value systems to reflect the modern period.

Concurrently, one of the more in depth changes in values and lifestyle will be the way people think about *‘property’*. In most of the world today, property is a powerful concept, with people often

associating their social status with what they *own*. As stated before, the monetary system requires 'cyclical consumption' to function. This naturally leads to the need for people to be *manipulated into thinking* they want or need a particular good or service. With the powerful tactics of modern advertising, most in the world support an artificial, *materialistic* value system that entails wanting more and more goods and services, often regardless of their necessity or utility.

In a Resource-Based Economy, the monetary system will no longer pollute the human mind via its manipulative arm - "advertising". The endless sea of billboards, media commercials, magazines and the like will no longer poison the landscape or our perceptions. This will cause a dramatic shift in the human value system and hence lifestyle.

More powerfully, in a Resource-Based Economy *there is no reason for property*. Property is an outgrowth of scarcity. People who had to work very hard to create or obtain a product or resource in turn protected it because it had immense value relative to the labor entailed along with the scarcity associated. Property is not an "American" or "Capitalist" idea... it is a primitive mental perspective generated from generations of scarcity. People claim "ownership" because it is a legal form of protection.

In a system of abundance, without the need for money, the idea of ownership becomes irrelevant. In this new system no one *owns* anything. Instead, everyone has *unrestricted access* to everything. Ownership is a massive burden. No longer will a person need to live in one place. One could travel the world constantly. Anything needed is obtained, without restriction. There is no reason for abuse for there is nothing to gain. You can't steal things that no one owns and you certainly couldn't sell them.

Household items are obtained through central distribution in the cities, while recreational items are available on call or near the location of their use. For example, if you go to a golf course you would select, on site, your clubs from the most effectively designed models available. You use them, and then you return them. If you decide to keep the clubs, go ahead - that is *your burden...* for why would a person want to transport, maintain and store golf clubs, when they can always have access to them and then return them onsite? Our homes today are full of junk that we hold onto because of the supposed value they maintain. This waste will no longer be needed.

In this model, the city complex or, in fact, the entire world, is really *your home*. Instead of having extraneous items like recreational equipment and vehicles sitting about your physical house, collecting dust when they are not in use, they are stored centrally for everyone's free access, with products being utilized actively, minimizing redundant waste.

If you require an automobile for whatever reason, the car is made available for you. When you get to your destination, the satellite based driving system will automatically make the car available for others to use, as opposed to sitting in some parking lot wasting space and time.

In society today, the need for property results in extreme product overlap and redundant waste. There is no reason for every person to “own” a car. Most only drive them for an hour a day. It is much more intelligent to create a universal *shared system*, for it dramatically reduces waste, redundancy and increases space and efficiency.

Summary of Chapter 6:

The cities within a Resource-Based Economy will fully utilize the systems approach, integrating all elements and processes of the city into a self-contained whole as is technically possible. We must start anew and not concern ourselves with the chore of ‘patching’ the old cities, which are intrinsically outdated. While there are many designs possible, including ‘Oceanic’, ‘Full Enclosure’ and, of course, ‘Land Cities’, the *Circular City*, as designed by Jacque Fresco, comprises one of the most efficient. Its different circular tiers each operate as a component to the overall functionality of the city, with room always for change, upgrades and transition.

Lifestyles in a Resource-Based Economy will be very different from the lifestyles of today, for the values of human beings will undergo profound change once the influence of the scarcity-based monetary system subsides. One of the more profound changes will be regarding our sense of ownership and property. There will be no need or reason for property in the future for importance will logically move from ‘acquisition’ to ‘access’. Everyone in the world will have access to their needs, with the entire system *based* on making that possible.

- Part 4: Overcoming Mythology -

Chapter 7:

Nature vs. Nurture

Human Behavior:

Some people who consider the tenets of a Resource-Based Economy think that the system would be difficult due to something called “Human Nature”. The argument is that humans are *inherently* competitive, greedy and blindly self-serving, implying that no matter how technically good things are in society, there will always be ‘corrupt’ people who want to abuse others and seek dominance.

“Human Nature” is defined as: ‘the shared psychological attributes of humankind that are assumed to be shared by all human beings.’⁶² Therefore, the implication of the term is that certain psychological, hence mental behaviors are in some way “hardwired” into a person. We are thus supposedly born

⁶² wordnet.princeton.edu/perl/webwn

with some preset psychological inclinations.

It is easy to see how this kind of assumption manifested, for if you look at the historical record of the human species thus far, we see an endless series of wars, genocides, conquests and power abuses. Given that this is the pattern we *recognize*... is it easy to assume that it must be “human nature” or “instinct” to behave in ways that are historically recurring.

Now, so called “criminal behavior” has been a focus in the field of psychology for a long time. Is it the responsibility of an individual's *genetic makeup* that makes them a so-called “criminal”, or is it the *environment* in which they are raised that determines this? This is the age-old question of ‘Nature vs. Nurture.’

First, what *exactly* is criminal behavior? How do we qualify behavioral distinctions that have been invented by man and change over time? The entire concept of criminality is temporal and relative to a culture’s values and concepts of morality. Only 600 years ago, the Aztecs engaged in mass human sacrifice for their gods, often killing tens of thousands at a time. Was this criminal activity? To us, perhaps, but to them it was an accepted social custom. What about the generations and generations of *accepted* slavery? In modern society it would be illegal to keep somebody in bondage and force them to work without pay. Is a criminal someone who steals food in order to feed his starving family?

Most psychologists and behavioral geneticists today try to address this subjectivity by narrowing down supposed “criminal tendencies” to termed *anti-social*, *impulsive* and *aggressive* behaviors...as broad and interpretive as these characterizations might also be. They also catalog and examine so-called “personality disorders”, such as *borderline*, *schizophrenic* or *obsessive*.

Now, the idea of genetics being the reason for so-called criminal behavior became popular in the early 19th century. Even Eugenics operations in the form of sterilization took place in order to “rid society of criminals, idiots, imbeciles and rapists.”⁶³ However, behavioral geneticists today will admit that no one has ever found a ‘criminal gene’. Rather, their work now tends to focus on the interaction of *Neurochemicals* in the brain, along with observational studies involving *family*, *twins*, and *adoption*.

Beginning with the observational studies, it is now well demonstrated that the *family* and ‘*Reared-Together*’ *Twin Studies* (twins that grow up together) are poor methods of genetic behavioral research. These methods are confounded by *environmental factors*, since family members share a common environment.

⁶³ Joseph, Jay, *A critical review of twin and adoption studies of criminality and antisocial behaviors*, *The Journal of Mind and Behavior*.

However, research of 'Reared-Apart' Twins are seemingly better methods, for the environments are at least respectfully different from the original family environments. Today, the most heavily cited studies in support of a genetic basis for personality disorders and behavioral tendencies come from *Reared-Apart Twin Studies*.

While the study of Twins Reared-Apart seems to eliminate the problem of mutual environmental influence in regard to family patterns, this method is plagued by the problem of the twins growing up in very similar social, economic and cultural environments.

For instance, one of the most famous studies on Reared-Apart Twins was one that is often called the "Minnesota Study".⁶⁴ Three hundred and forty eight pairs of twins were studied at the University of Minnesota, with the most noted case from this study, often cited to defend the genetic basis of behavior, known as the "Jim Twins" case. Jim Lewis and Jim Springer were separated four weeks after birth in 1940, they grew up 45 miles apart in Ohio, and were reunited in 1979.

The study of these two reunited, identical twins produced the following concordances:

- Both twins are married to women named Betty and divorced from women named Linda.
- One has named his first son James Alan while the other named his first son James Allan.
- Both twins have an adopted brother whose name is Larry.
- Both named their pet dog "Toy."
- Both had some law-enforcement training and had been part time Deputy Sheriffs in Ohio.
- Each did poorly in spelling and well in math.
- Each did carpentry, mechanical drawing, and block lettering.⁶⁵

First of all, let it be firmly established that both "Jims" grew up only 45 miles from each other in Ohio. Considering the close proximity of the twins and the general cultural disposition of the region, it is safe to assume that the two men each were subjected to very similar values and traditions. Culturally, Ohio as a whole has little diversity when compared to other states. 86% of the state is white⁶⁶ while 82% are Christian.⁶⁷ This is important because the less diversity a region has, the more uniform the environmental influences. Another important element that this author cannot express due to the lack of available information is the cultural dispositions and values of the *parents* involved. If the parents of both "Jims" were also native to the Ohio region they were brought into, it further

⁶⁴ <http://mctfr.psych.umn.edu/research/UM%20research.html>

⁶⁵ <http://mctfr.psych.umn.edu/research/UM%20research.html>

⁶⁶ <http://www.census.gov/popest/states/asrh/tables/SC-EST2005-03-39.csv>

⁶⁷ <http://www.spiritus-temporis.com/ohio/demographics.html>

compounds the propensity of cultural similarity and hence behavioral similarity.

As far as each being married to women named Betty and divorced from women named Linda, of the top one thousand most common female names in America, Linda is #3 and Betty is #14⁶⁸. This is statistically staggering in view of the number of names in existence, showing a high probability of coincidence. As far as the names 'James Alan' and 'James Allan', the most common male name in America... is James!⁶⁹ As far as Allan/Alan, more research would need to be done on the cultural reasoning behind those middle names in the region of Ohio that they both lived. In regard to "Both twins have an adopted brother whose name is Larry", this is a rather odd thing for the Minnesota researchers to report, for the tradition of naming children typically comes from the parents, not children. What this actually reveals has nothing to do with the 'Jim Twins', but rather shows a powerful cultural similarity of the *parents*. If each set of parents both had a propensity to name a son Larry, then it suggests that the parents were possibly very culturally similar, hence revealing that the environmental influences on both 'Jims' were also very similar. Then there are the dogs named "Toy". Well, while 'Toy' is not a common dog name, we need to know where the name came from initially. Someone had to suggest the name to the 'Jims' in order for them to be aware of the name to begin with. The reasoning for this name could be multifaceted and logically derived from the environment. For example, nearly all domesticated dogs traditionally have toys that their owners provide. The advent of the name 'Toy' could have come from an association made by a young Jim hearing his parent reference the toy when playing with the dog. For example, there have been historical instances where a mother would say to a young child who is just learning to speak something common like, "Daddy's home", when announcing the arrival of the father to the child. The child would eventually hear these words and associate them with the father walking into the house. In this common scenario, some children have confused the father figure with the word "home" rather than "daddy". They would thus later ask "when is *home* coming home?". In other words, the word toy could be a reference name that has been contextually redefined. In the case of the Jim twins, we don't have enough information to know if the name "Toy" is genetic or environmental, but reasoning would naturally lean towards environmental.

Now, it isn't the point of this document to develop a full argumentative treatise on the lack of validity of the Twin Studies. The point here is to express that cultural factors oriented within the society are just as powerful as familial factors. The 'Jim Twins' grew up in the same areas and had similar values and environmental influences. This point must be factored in and an in-depth analysis needs to be done regarding the *cultural* causes involved in such a study. Overall, the Twins Studies, while highly praised, show extreme weakness in understanding the true *causality* of a particular concordance.

⁶⁸ http://names.mongabay.com/female_names.htm

⁶⁹ http://names.mongabay.com/male_names.htm

However, this doesn't mean genetics don't have a strong influence on our lives. It is very important to consider the *true* genetic traits and the effects they have when intermixed with culture. While most agree that physical attributes such as eye color, height, and some allergies are genetic, many do not consider the ramifications these attributes have in *shaping* the environment of that person.

For example, suppose you have two identical twins separated at birth and each has the genetic predisposition to grow to over 6 feet, each has a high metabolism that keeps him or her thin, and a neurological wiring that supports acute eye-hand coordination. Let's say they are both adopted by middle class families in suburban environments and grow up in what would be considered a traditional American childhood culture, including sports activities. Since each brother has outstanding height and increased coordination genetically, they will have an advantage in sports. Since basketball and football are the two main sports in America, they will likely play one or the other at some point. Given their slender build and tall height, they might gravitate towards basketball. If they obtain moral support from their friends and family, perhaps they will each grow up to play professional basketball.

Is this activity of playing basketball genetic? Not in the sense that some behavioral geneticists would suggest. The fact is the *propensity* for playing basketball is derived from physiological advantages that are genetic, along with environment based cultural traditions. There is no evidence to suggest that genes somehow *make* the basketball player. This is similar to genetic studies which claim they are looking for the gene which causes smoking or a makes a person become a Republican... it's rather absurd. The true genetic basis relevant here is *physiological*, not *behavioral*.

Neurochemicals are further examples of physiological influences on behavior. Serotonin, for example, has been shown to be related to so-called "antisocial" behavior. Low Serotonin levels can apparently lead to impulsivity and aggression.⁷⁰ Be that as it may, Neurochemicals do not instruct a person's behavior in specific ways. Just like other physiological attributes, they set certain propensities. While there is certainly a genetic basis to these chemicals, which could relate to familial heredity and generate so-called 'personality disorders' that result from chemical imbalances, the Neurochemical behavior assumption does not give any specifics as to *how* those chemical propensities will manifest. In other words, the behavior that might result from the interaction of these chemicals can only be extremely generalized. One could say that a person with a certain imbalance has a propensity to get "angry" more easily than the standard population. While this is informative, it tells us nothing about how that behavior will manifest. It is the *environment* that determines the actual behavior or lack thereof it.

⁷⁰ Elliot, FA, *A neurological perspective of violent behavior*. In DH Fishbein, *The science, treatment, and prevention of antisocial behaviors*, pp. 19-21, 2000, Civic Research Institute

There is no scientific evidence that really supports the notion that any of our behaviors are strictly the result of our genes. Those behaviors that people often attribute to 'instinct' or 'human nature' can almost always be tracked to environmental influences. The notion of 'human nature' is largely mythological. It stems from primitive religious notions that the human being is either 'good or evil' inherently. The pursuit of people who seek to find the "gene" or the like which causes a particular behavior is essentially a form of superstition. It is like a person being "possessed by demons" which control their behavior.

The fact is, while Neurochemicals and physiological traits set propensities for a person's reactions and social gravitation, it is the *environment that really creates our values and behavior. There is no fixed, predetermined 'human nature'. Our values, methods and actions are developed and derived from our experiences.*

As referenced before, the 'Merva-Fowles' Study, done at the University of Utah in the 1990s, found powerful connections between unemployment and crime: Their findings found that a 1% rise in unemployment resulted in:

a 6.7% increase in homicides;

a 3.4 % increase in violent crimes;

a 2.4 % increase in property crime.

Not only that, they also found that those who were recently unemployed and deprived were especially vulnerable to illness and disease. Their findings found that a 1% rise in unemployment also resulted in:

a 5.6% increase in death from heart attacks

a 3.1% increase in death from strokes

Based on the 1990-1992 unemployment rate, this resulted in 35,307 more heart attack deaths and 2771 more stroke deaths. They also found that those unemployed had a much higher likelihood of high stress, alcoholism, cigarette smoking, depression and the consumption of less healthy diets.⁷¹

This study reveals how suffering and aggression can be the results of environmental depravity, and how powerful the environment is in shaping our behavior and values. If a person needs to survive, they will do what they need to do. Does this make them "criminal"? Not necessarily.

The bottom line is that our behavior is based upon what we *learn*, coupled with the bio-social pressures that we must deal with in order to survive. Our genetic makeup does not tell us anything about how to actually function. It is what we learn and are accustomed to which creates our behavior. An insulted man who pulls out a gun and shoots somebody had to learn, at some point in his life,

⁷¹ Merva & Fowles, *Effects of Diminished Economic Opportunities on Social Stress*, Economic Policy Institute, 1992

what a gun was, how to pull the trigger, along with what he was to find ‘insulting’ to begin with. Every word on this page is learned by this author one way or another. Every concept is a collective accumulation of experience. There is really nothing that we think which isn’t presented to us in some environmental form. A person born in a particular culture will absorb the values, traditions and hence behaviors of that culture. A Chinese baby taken at birth and raised in a British family in England will develop the language, dialect, mannerisms, traditions and accent of the British Culture.

Now, returning to our original point regarding people who believe that a Resource-Based Economy will never work due to the ‘despotic attributes of human nature’; let it be made clear that every person who has ever cheated another person has had a *motivation* to do it. This motivation is learned. Therefore, our goal as a society would be to eliminate the motivations, or *conditions* that generate socially offensive behavior.

In society today, the most fundamental condition for offensive behavior is derived from The Monetary System. As expressed before, The Monetary System perpetuates corruption, scarcity and insufficiency. So-called *decency* cannot exist in a world of competition, wealth imbalance, poverty and deprivation. The despotic behavior we see in the world today is not the result of ingrained genetic forces. It is essentially the result of years of *scarcity and competition oriented conditioning*. Hierarchy, greed, competition and dominance are social manifestations. If you look to the animal kingdom, you usually see social hierarchy and brutal dominance. Many often say it is an *instinct* for these animals to behave this way and that humans share the same instinctual nature. While this seems observationally logical, it isn’t taking into account the *scarcity* that exists in the animal kingdom. If there isn’t enough to go around, the more aggressive animals will rise to the top generating hierarchy, while the rest compete for resources in a seemingly greedy fashion.

Professor of Neurology and Neurological Sciences at Stanford University, Robert Sapolsky, spent 30 years personally studying a Baboon troop in East Africa. This troop exhibited the same social hierarchy, competition and dominance patterns as human beings do today.

However, something interesting happened about 10 years into the study. The troop was exposed accidentally to a disease that killed off the Alpha male baboons, leaving only the subordinate male baboons along with the females. This event dramatically altered the social nature of the troop. None of the remaining baboons filled the newly open positions of dominance. The hierarchy virtually stopped and aggressive behavior subsided tremendously. This is still the case with this troop 20 years later. Even when new, adolescent males would come join the troop, it took about 6 months for the behavior of that new baboon to adjust from the typically competitive patterns to the troop’s new balanced and non-aggressive behaviors.⁷²

⁷² Interview with R. Sapolsky, *Stress*, National Geographic, 2008

While this observation leaves many questions, it goes to show how *behavior changes* based on how the environment changes. To think that our human society is locked into some prison of ‘instinct’ and ‘human nature’ is not viable. Even if we have ‘predispositions’ to certain survival patterns, it is still the environment that generates the actual behavior.

In the words of Epidemiology professor Sir Michael Marmot in reference to the Baboon Study:

“I would say that what we have learned... from the study of the nonhuman primates is that the conditions in which people live...are absolutely vital to their health. I think what we are trying to create is a better society...how can we create a society that has the conditions which will allow people to flourish, and that’s where this is heading- to create a better society that promotes human flourishing.”⁷³

Dr. Sapolsky adds:

“One of the things the baboons teach us is that if they are able to, in one generation, transform what are supposed to be textbook social systems, ‘engraved in stone’... we don’t have an excuse when we say there are certain inevitabilities of human social systems.”⁷⁴

In a Resource-Based Economy, the goals are equality, liberty and abundance. If these environmental factors can be created for humanity, our social system will *evolve out* of the degenerative, corrupt and self interest oriented patterns we see today.

The Legal System:

When it comes to human behavior, society today attempts to control itself by way of *threat*, using Laws. Laws are there to control people. They are ‘patches’ which do not address the root causes of behavior. If a person is arrested for stealing, very little thought is given as to *why* that person chooses to steal to begin with. Rather than consider the root causes, society takes the easy way out and often removes the “criminal” via prisons.

As of 2007, over 9 million people are in prisons throughout the world, with the United States leading the way with the highest prison population of any other country.⁷⁵ This is just sad.

The source of any so-called crime is really society itself. There is no such thing as a “criminal”. As repeatedly expressed, the Monetary System generates corruption by its very construct. As the Merva & Fowles study presented previously clearly shows, socially offensive behavior is *directly* related to socioeconomic circumstances. The great majority of people in prisons come from deprived socioeconomic positions.

⁷³ Interview with Sir Micheal Marmot, *Stress*, National Geographic, 2008

⁷⁴ Interview with R. Sapolsky, *Stress*, National Geographic, 2008

⁷⁵ Walmsley, Roy, *World Prison Population 2007*, International Center for Prison Studies, London

Laws are band-aids. Instead of depending on a failed system of punishment or incarceration after the damage is done, we need to address the inadequacies of society which lead to socially offensive behavior, such as poverty, malnutrition, homelessness, depravity, social distortion, failed education, financial stress, neglected child care, and the like.

Therefore, if we want to alter the behavior of people, we have to alter the social conditions. We want to 'design out' the flaws. We design out the need for paper proclamations and laws. Laws are byproducts of insufficiency. You don't put up a sign that says: 'Speed Limit 55 miles per hour' for safety. You design the system technically so safety is built in and human error is not an option. If you don't want a person to steal, you make what they need readily available to them without the need for subservience or competition.

With the progress of technology today, we have the ability to create a new social system that can allow all humans access to all the necessities of life, without a price tag, debt or servitude. This will have a profound effect on the way people treat each other and interact in society. A staggering drop in crime would be the result, for most crimes are monetary related. This isn't to say that overnight all other forms of socially offensive behavior will disappear. Jealousy and other forms of *confidence issues* will still generate problems. However, the treatment of those who commit socially offensive acts in the future will be dramatically more humane and proactive. If a serial killer is found and brought in, he or she would not be treated as a *criminal*, but rather as a sick patient. Society will understand that people are products of their environment and rather than condemn the person to a cold concrete cell, social scientists will heavily research the cultural causes that generated the serial killer's behavior, and consider those conditions that need to be altered.

Summary of Chapter 7:

Human behavior is a product of the environment. Genetic components, which manifest in physiological traits, serve only to create *propensities* for certain reactions. Therefore, since it is the environment that influences our behavior itself, if we find patterns of behavior in our society that are socially offensive and abusive, we should look to the environment to figure out why those behaviors manifest to begin with. The legal system today is a massive social distortion that does not take into account the environmental influences of a supposed "criminal". In a Resource-Based Economy, where scarcity and deprivation are deliberately reduced through modern technological methods, the behavior of society will change dramatically for the better.

Chapter 8: Functional Spirituality

People want answers, so through time we have invented explanations for phenomena. As our societies have grown, our tools for analyzing the world and its attributes have improved and thus our understandings have changed based on newer discoveries. Knowledge is an evolutionary phenomenon just like everything else in nature. Therefore, it is critical that we all be mentally and emotionally prepared for our traditional beliefs to lose relevance. For some, this is a very difficult process due to the emotional attachments that have been created around certain beliefs. Religion is a powerful example of this ideological attachment.

Establishment Religion, in many ways, seems to be rooted in a perceptual misunderstanding about life's processes. For instance, it presents a worldview that often puts the human on a different level than other elements of nature. This 'spiritual ego' has led to dramatic conflicts for generations, not only between human beings, but inadvertently between us and the environment itself. However, as time has moved forward, Science has shown how human beings are subject to the exact same forces of nature as everything else. We have learned that we all share the same atomic substructure as trees, birds and all other forms of life. We have learned that we cannot live without nature's elements... we need clean air to breathe, food to eat, energy from the sun, etc. When we understand this *sympiotic* relationship of life, we begin to see that as far as 'relationships' are concerned, our relationship to the planet and nature is the most profound and important. The medium by which this is expressed, is *Science*, for The Scientific Method has allowed us insight into these natural processes, so we can better understand how we 'fit' into this life system as a whole.

The Religious Ideal:

Nearly all religions of the world talk about certain ideal values for humanity.

Christianity:

“Do unto others as you would have them do unto you.”

Buddhism:

”Putting oneself in the place of another, one should not kill nor cause another to kill.”

Confucianism:

”Never impose on others what you would not choose for yourself.”

Hinduism:

”One should never do that to another which one regards as injurious to one’s own self.”

Islam:

”Hurt no one so that no one may hurt you.”

Judaism:

”The stranger who resides with you shall be to you as one of your citizens; you shall love him as yourself.”

Taoism:

”Regard your neighbor's gain as your own gain, and your neighbor's loss as your own loss.”

Regardless of these notions, one glance at society today makes one wonder why the ideal of universally valuing and respecting your fellow human being has never taken root. It was the Jesus character who said: “Love thy neighbor as thy self”. But how? How can we have a society where people live together in harmony, working for the *common good*, as the religious ideals promote?

The answer is that *it is up to us* to design a system that *allows* for those humane ideals to flourish.

Today's self interested, money oriented society creates an environment that refuses to allow for the universal caring of another. This system is based on the perpetuation of oneself, at the *expense of others*, and therefore it can never allow for a world of balance and harmony.

The fact is, it is time to stop praying, stop wishing and stop blindly talking about our supposed humanistic and religious ideals and *actually work to make them happen!*

Talk is Cheap:

A Resource-Based Economy puts into practice everything the great religious and philosophic teachers have always talked about since time began in regard to humans embracing each other as their own, and working together in mutual respect and harmony. The use of science and The Scientific Method, while often deemed cold and heartless, actually presents one of the most profound spiritual unfoldings we have ever known. Unlike those who endlessly *talk* about peace, love and harmony among the peoples of the earth, science can actually *work* to make it happen. There is nothing more caring than The Scientific Method, for the results have proven to be cataclysmically beneficial to the whole of humanity. While many people look upon Mother Teresa's selfless nature with great awe and respect, few tend to see Alexander Fleming, the man who discovered Penicillin, in the same romanticized way. Penicillin has saved countless more lives today than any charitable idea or organization. The point is that science and technology are *divinity in action*.

Summary of Chapter 8:

It is time we stop pontificating and providing lip service to those *spiritual* values which religious and secular philosophers have been discussing for millennia and finally put them into practice. While there are endless scientific and superstitious opinions about who we are and where we have come

from, the most important issue at hand exists in the *here and now*. In view of the terrible suffering and questionable future of the human race, worrying about if god created the universe...or if we were created by extraterrestrials...or even if we are a product of evolution and celestial matter, is *meaningless*. Big Bang or no Big Bang it doesn't change the problems we have now. We cannot wait for some divine revelation or some "great man" to guide us. We must realize that *we are on our own* on this planet and it is up to us to change the world for the better. Science is the tool for this *functional spirituality* and if we work to apply its method for the betterment of civilization itself, we *can* reach the spiritual goals we have sought since antiquity.

- Part 5: Taking Action -

Chapter 9:

The Movement

The Zeitgeist Movement is not a political movement. It does not recognize nations, governments, races, religions, creeds or class. Our understandings conclude that these are now false, outdated distinctions that are far from positive factors for true collective human growth and potential. Their basis is in power division and stratification, not unity and equality, which is our goal. While it is important to understand that everything in life is a natural progression, we must also acknowledge the reality that the human species has the ability to drastically slow and paralyze progress, through social structures which are out of date, dogmatic, and hence out of line with nature itself. The world you see today, full of war, corruption, elitism, pollution, poverty, epidemic disease, human rights abuses, inequality and crime is the result of this paralysis.

This movement is about awareness, in avocation of a fluid, evolutionary progression, combining the personal, social, technological and spiritual. It recognizes that the human species is on a natural path for unification, derived from a communal acknowledgment of fundamental and near empirical understandings of how nature works and how we as humans fit into/are a part of this universal unfolding we call life. While this path does exist, it is unfortunately hindered or not recognized by the great majority of humans, who continue to perpetuate outdated and hence degenerative modes of conduct and association. It is this intellectual irrelevancy that the Movement hopes to overcome through education and social action.

The goal is to revise our world society in accord with present day knowledge on all levels, not only creating awareness of social and technological possibilities many have been conditioned to think

“impossible” or against “human nature”, but also to provide a means of overcoming those elements in society which perpetuate these outdated systems.

Bridging the Differences:

In order to do so, we first have to establish a perspective in reference to the world today. As of now, the technology that can free humans from meaningless tasks is stifled due to the monetary based labor system. This is unacceptable. The fact that technology is not being allowed to flourish for the benefit of human kind is, in fact, a *Civil Rights issue* on a certain level.

It is time we forget about our differences and come together for the collective benefit of our species. We all need food, air, water and the like, and we all want liberty and happiness. The only way this is going to be accomplished is if we all work together to overcome a now-obsolete social system.

Of course, this is easier said than done, as humans who have undergone tremendous social distortion currently run our world. Their often elitist values are constantly reinforced by the material benefits their business and political corruptions obtain. We should feel pity for their ignorance, however. In the words of Ghandi: “Do not hate your oppressors. They need to be liberated just as you do”.

The fact is, traditional political activism is not the path. The establishment has gotten far too good at controlling traditionally oriented dissent. Rather, the path of this movement is to first *create grassroots awareness on a global scale*. This comes down to communication. Those of us who believe in this direction must work to spread awareness of its ideas. Humanity must first be aware of this social direction before any kind of action can be taken.

As of now, thezeitgeistmovement.com is being developed into 30+ languages. We will be creating country, state and regional organizations in the hopes of eventually having a Movement organization in every area of the globe.

This kind of communications project will have difficult barriers from various ideological groups. It very important that we *bridge the differences* between cultures by expressing how, at the core, we are *really all the same*. Our similarity and needs greatly over-shadow our religious and political differences.

Apart from spreading awareness, our focus should also be on continually exposing the monetary frauds and social corruptions that are endlessly churned out in our society. We want to make the governments and peoples of the world feel *embarrassed* by the sickness their systems generate, while also making the population understand the *root causes* of the corruption and how to move away from it with the intelligent application of science and technology for social and environmental concern. As expressed, the monetary systems of the world are all failing at this time. The result of this could be catastrophic. It is critical that we absorb those who are being hurt by this monetary failure and give them direction. Once a very large number of people on the planet join hands in common pursuit of a dramatic social shift, we will begin the next phase, which will put pressure on

all nations simultaneously to begin moving out of the monetary structure.

Until then, communication, coupled with peaceful social rebellion is key. As a general rule, all social facets that perpetuate the profit system, war and human abuse should be banned. No one should ever join any military in any nation or work for the war industry. In turn, the political system needs to be exposed for what it is. The governments of the world today are run by businessmen, lawyers and military men... likely three of the most useless specializations we have. When we understand that our problems on this planet are *technical*, we then see that if any group of people were to be considered as qualified to make decisions about *anything*, they would naturally be *technically and thus objectively focused*... not *politically motivated*. Politics is a monetary creation.

Tips for spreading awareness:

- Post thevenusproject.com and thezeitgeistmovement.com online wherever you can.
- Create YouTube videos promoting both the Movement and the idea of a Resource-Based Economy.
- Call into radio shows and bring up the Movement whenever possible.
- Download *Zeitgeist Addendum* and screen it in your community; get it on public access/networks.
- Copy this booklet and distribute it via hard copy or Cd-Rom
- Download the Orientation Presentation Slideshow and Slideshow Movie and hold your own events.
- Saturate the Internet as much as possible.
- Be aware that March 15th of each year is “Zeitgeist Day” and hold an event in your area.
- Work to specifically inform those who are suffering due to the pending economic collapse.
- Continually expose the corruption of our current system, publicly.
- Contact existing “activism” groups, such as the ACLU and Greenpeace, and try to explain to them how their efforts, while very noble, are not going to solve any of the major social problems, for they are not addressing root causes.

Interdisciplinary Teams.

The backbone of the initial development of this new social system will come from teams of researchers and technicians working in all relevant fields. These can be called *Interdisciplinary Teams*.

The first team we are putting together is the “Communications Team”. Everything listed above would constitute some action of this team. Anyone who supports this direction should help to inform others. We are all a part of the Communications Team on a certain level.

In turn, more teams will be created that will work in specific areas related to the *implementation* of a Resource-Based Economy. There are many scientific fields that are needed to solidify the underlying mechanisms of the project. These Interdisciplinary Teams would include research into computer programming, city planning, robotics, education, data collection, etc. Please check back to www.thezeitgeistmovement.com for organizational announcements in this regard. If you feel you

have a skill that would contribute to this development, please let us know when we begin to setup the teams. A whole section of the website will be devoted to this interaction and focus. As we grow, full conferences will emerge. In time, we will eventually be able to begin the *first city*, even if it is only a prototype of sorts.

Final Thoughts:

There are many out there who would say that what we are describing here, that is the development of a *Resource-Based Global Economy*, would never happen. They would typically cite “human nature”, the “power elite” or erroneous technical opinions in their defense. This cynicism has no support in view of humanity’s technical and social development throughout history.

We have come from a world of extreme superstition, abject slavery and extreme racism and social prejudice, to a slowly emerging world of race equality, scientific ingenuity and emerging values that desire to see humanity benefit as a whole.

In the words of Carl Sagan:

”The old appeals to racial, sexual and religious chauvinism, to rabid nationalist fervor, are beginning not to work. A new consciousness is developing which sees the earth as a single organism, and recognizes that an organism at war with itself, is doomed. We are one planet.”⁷⁶

We have gone from smoke signals to the telephone to electronic mail sent at near the speed of light. Everything that has once been considered impossible has gradually become possible. The Wright Brothers were told by “experts” that it was impossible to fly...years ago people who talked of traveling to the moon were dismissed and labeled as “Mooniacs”. To assume something is ‘impossible’ in this world is a failure of creativity.

If 120,000 people can come together to build a nuclear bomb, as was done with the *Manhattan Project* in the late 1930s, there is no reason why we cannot come together and use human ingenuity to accomplish incredible social achievements for the *betterment* of humanity. It is time we unleash our ‘Weapons of Mass Creation’ (WMCs) unto the world. It is time we take responsibility for each other and ourselves. We have the knowledge, means and initiative to devise an entirely new social architecture that can create a world we *actually enjoy* and flourish in.

Very simply, it is time to grow up.

-Peter Joseph | Roxanne Meadows | Jacque Fresco, *February 2009*

⁷⁶ Sagan, Carl, *Cosmos* Video Series, Cosmos Studios, 1980