

The cover images are of

the Novorossiya Battle Flag of

Pro-Russian Ukraine resistance against attacks by Kiev/USA/NATO

now escalating toward USA/NATO v. Russia World War III

and

E8 Root Vectors for Lagrangian of Gravity and the Standard Model now leading to Palladium-Deuterium-ZeoliteY Fusion and Almost Unlimited Nearly Free Energy Other images in this book are taken from material on my web sites at <u>http://www.valdostamuseum.com/hamsmith/</u> <u>http://www.tony5m17h.net</u> where the source credits and references can be found.

This book, a Sequel to my 2010 book Crackerville (a reformatted copy with updated Science and History Parts is appended hereto) which was dedicated to Gerald Massey, is dedicated to Alexander Grothendieck (died 13 Nov 2014) who said:

(from 13 Nov 2014 thebigquestions.com blog by Steven Landsburg, translation by Roy Lisker)

"... in every milieu and every sphere of human activity, and ... every society and every period of human history ... Most ... take refuge within a specific conceptual framework, in a "Universe" which seemingly has been fixed for all time ... They may be compared to the heirs of a beautiful and capacious mansion in which all the installations and interior decorating have already been done,... this conditioning process ... could be considered a kind of 'cultural blindness' - an incapacity to see (or move outside) the "Universe" determined by the surrounding culture ... I consider myself to be in the distinguished line ... whose spontaneous and joyful vocation it has been to be ceaseless building new mansions. ... However once everything has been set in place ... we aren't the kind of worker who will hang around ... The rightful place of such a worker is not in a ready-made universe, however accommodating it may be, whether one that he's built with his own hands, or by those of his predecessors. New tasks forever call him to new scaffoldings ... He belongs out in the open. He ... isn't afraid of being entirely alone in his task, for months or even years or, if it should be necessary, his whole life, if no-one arrives to relieve him of his burden.".

First Grothendieck Universe = Empty Set

Second Grothendieck Universe = Hereditarily Finite Sets = = Classical Lagrangian Physics = Tensor Products of Cl(16)

Third Grothendieck Universe = Algebraic Quantum Field Theory = = Completion of Union of All Tensor Products of Cl(16)

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Copy of 2010 book Crackerville after page 22

This book is a Sequel to

my 2010 book Crackerville

(a reformatted copy with updated Science and History Parts is appended hereto) whose Life story ended in 2010, saying

"... FIN ??? ...

I would like to write an ending to the LIFE section of this book by telling you how the BuyOut proposition turned out, and what happened to The Property, the Main Street Neighborhood, The Church,

The Pastor, The Chief, and the Fat Man,

but the ending lies in the Future, so this Story ends in suspense. ...".

Now, in 2014, the Future is beginning to emerge

so here is a Possible Future Fiction Story:

Little Local Banks and Big 5 Wall Street Banks

In 2010 Fat Man had hope that the Local Little Bank in which he owned stock would make a loan to The Church for expansion in the Main Street Neighborhood. The Local Little Bank was not controlled by the White Racist Crackerville Consensus or by the Big Atlanta Bank so The Pastor and The Church had a chance for a loan

but

the Local Little Bank, like all small community banks in the USA, was under attack from a much more powerful source, the Big 5 Banks of Wall Street, who had decided that they would not tolerate any independent banking of any kind and that they would use their control over the USA government to get the FDIC(Federal Deposit Insurance Corporation)/OCC(Office of the Comptroller of the Currency) to kill all small independent banks.

The FDIC/OCC went after the Local Little Bank, claiming that it had insufficient capital and too many questionable loans.

The hostile approach of FDIC/OCC to small banks was in marked contrast to FDIC/OCC subservient tolerance of the gross excesses of the Big 5 Wall Street Banks that were being bailed out on the level of Trillions of Dollars by USA/Fed/Treasury.

The FDIC/OCC told the Local Little Bank that it needed to raise \$5 million capital. The Local Little Bank got an Investor to agree to put in the \$5 million.

The FDIC/OCC said that the Investor could not invest because the Investor was in the construction business.

The Investor hired a blue-ribbon law firm to create a Separate Bank Investment Entity that was just as legally separated as were similar Wall Street entities.

The FDIC/OCC said that \$5 million was not enough, it should be \$15 million.

The Investor agreed to put in \$15 million through its Separate Bank Investment Entity. The FDIC/OCC, in 2010, simply closed the Local Little Bank anyway.

Closing the Local Little Bank had consequences:

It killed the prospect of a loan to The Church which also killed any motive for White Racist Crackerville to BuyOut The Church.

It made Stock in the Local Little Bank worthless, so Local Stockholders like the Fat Man lost some of their Life Savings.

Although depositors (including the Fat Man) did not lose the principal of their money, the Near-Zero Interest rates mandated by the Fed/Treasury to maintain the Trillions / year bailouts of the Big 5 Wall Street Banks deprived the depositors of a reasonable amount of Interest Income.

Some Local Little Bank Employees (such as Loan Officers) lost their jobs.

Ruling the World

The Big 5 Wall Street Banks had cost Fat Man some of his Life Savings, cut his interest income cut to near-zero, and substantially eliminated his income from construction-related investments (because USA/Fed/Treasury money-printing to guarantee 25% returns for the Big 5 Wall Street Bank Casino meant that all Big Capital went to the risk-free 25% return Casino and that very little capital was available for investment in Productive Construction Projects) SO

Fat Man was reduced to living on some Social Security and some Savings Deposits (enough for living for a few more years based on his relatively frugal life-style), and Fat Man was not a Happy Man.

On the other hand, the Big 5 Wall Street Banks were Not Happy either. Although the **Big 5 Wall Street Banks** had total control of the USA Government and the ability to kill other banks they did not like and to cripple the finances of anyone in the USA, that was not enough for them.

They wanted to Rule the World.

In 1999, they had used their control of the USA and NATO to launch the Kosovo War which was the Victorious High-Water-Mark of their Imperial USA, effectively giving them Rule Over the World (EXCEPT China and Russia).

The EXCEPT (China and Russia) was very painful to the Big 5 Wall Street Banks.

As to China,

the Big 5 Wall Street Banks:

tried to weaken and split the Chinese Government by 1989 counter-revolutionary movement that was stopped by a crackdown;

used Falun Gong as cover for subversion, thwarted in 1999 by a crackdown; instigated 2014 Hong Kong Yellow Umbrella protests, resolutely opposed by the Chinese Government.

Meanwhile, China used the Muddled Middle East conflicts to test the strength of the USA Military arm of the Big 5 Wall Street Banks:

Although the USA attacked Iraq in 2003 to secure 100 billion barrels of oil the USA failed to attack and secure the Iranian oil fields bordering Iraq. China had armed Iran with missiles that could sink USA aircraft carriers. The unwillingness of the USA to risk such casualties showed China that the Imperial USA Military had serious weaknesses. The Big 5 Wall Street Banks saw themselves as Plantation Owners of Industrial China with the Chinese Government to be merely the Overseers of the Laborers

but in fact the Chinese Government maintained true power in Industrial China and

therefore the Real Primary Power on Earth since the Dominant Manufacturer has always Ruled the World from the Romans to the British Empire to early-mid 20th Century America.

This is the flag that terrifies the Big 5 Wall Street Banks



for two reasons:

1 - It reminds the Big 5 Wall Street Banks of the Confederate States of America, and the failure of the Plantation System that the Big 5 Banks tried to use in China.

2 - It is now successfully flown by Novorossiya as a Battle Flag against attacks by Kiev/USA/NATO.

As to Russia,

the Big 5 Wall Street Banks tried to loot and destroy Russia after the USSR dissolved in 1991. After initially successful looting and destruction while Russia was nominally ruled by weak incompetent Yeltsin, in 1998 Vladimir Putin became Chief of the FSB (successor to KGB) which was the True Center of Power in Russia (analogous to the USA Big 5 Banks and the Chinese CPC/PLA). When the 1999 Kosovo War failed to get Big 5 Bank control of the Ukraine and Russia the Big 5 Banks, considering the Ukraine as the soft-underbelly doorway into Russia, used the 2004 Orange Revolution to install a CIA puppet Ukrainian government. However, in 2010 the Ukraine elected Pro-Russian Yanukovich as President, so in 2014 the Big 5 Banks/USA/NATO ousted Yanukovich in a Coup that installed a new CIA puppet government. Russia's Putin responded by annexing Crimea and supporting pro-Russian Novorossiya in what was formerly Eastern Ukraine thus firmly frustrating the Rule-the-World ambitions of the Big 5 Wall Street Banks.

Confrontation

2014 saw Economic / Military Confrontation between

the Big 5 Wall Street Banks with their Big Money and USA/NATO Military Arm

and

China / Russia

The Big 5 Wall Street Banks had these Money and Military assets:

Money: According to the OCC Quarterly Report on Bank Trading and Derivatives Activities (Third Quarter 2013) the Assets and Notional Amount of Derivatives = Phantom Claims held by the top 5 Bank Holding Companies were (in \$ millions):

	Real Assets	Derivatives
JPMORGAN CHASE	2,463,309	73,255,282
CITIGROUP	1,899,511	63,245,172
BANK OF AMERICA	2,128,706	57,929,528
GOLDMAN SACHS	923,359	50,372,894
MORGAN STANLEY	832,223	50,332,826
total	8,247,108	295,135,702

According to the Bank for International Settlements, the total Notional Amount of Derivatives in the entire world in June 2012 was \$ 638,928 billion

SO

the Big 5 Banks of the USA own by themselves

\$ 295 trillion out of \$ 639 trillion of the world-wide Derivatives market.

Therefore,

the Big 5 Banks control what is by far the largest part of the Dollar Economic System and therefore control the Dollar Economic System itself.

The Big 5 Banks use their control of the Dollar Economic System to try to control the entire world, by rewarding their friends with things like political campaign contributions and by punishing anyone who opposes them by denying credit, imposing sanctions, etc.

Military: the USA/NATO military has two components - Nuclear and Conventional.

Its Nuclear Triad (Submarines, Missiles, Bombers) can destroy thousands of targets world-wide.

Its Conventional Forces (Aircraft Carriers, Bomber Bases, Satellite Command and Control) are by far the Most Elaborate on Earth, as was shown in the 1999 Kosovo War, and are maintained at a very high level by the USA Military/Industrial Complex that is, like the Casino, Centrally Planned and backed by unlimited Fed/Treasury funds.

China / Russia had these Money and Military assets:

Money: The Top 5 Banks of China have (according to <u>www.cba.ca</u>) (in \$ millions):

ICBC China Construction Bank Corporation Agricultural Bank of China Bank of China Bank of Communications	Real Assets 2,803,129 2,232,764 2,116,358 2,026,278 842,651
total	10,021,180

Although the Big 5 Banks have \$303,3812,810 million (Assets + Derivatives) the Derivatives are only Phantom Claims in the UnRealistic Finance Derivatives World and

are only worth their net value (ZERO) in the Real World of Manufacturing so

in the Real World the Big 5 Banks have only \$8,247,108 million Assets and

China Banks have more Real Assets (\$10 trillion to \$8 trillion)

In competition for Global Financial Hegemon:

China / Russia has Chinese Manufacturing Machine fed by Russian Resources while

the Big 5 Banks / USA has only Lawyers, Accountants, and Bankers which would be irrelevant with China / Russia as Global Financial Hegemon.

Military: China is building its Nuclear and Conventional forces, but its primary strength is in defensive elements: missiles that can sink USA aircraft carriers (those missiles, given to Iran, deterred the USA from attacking Iran during the 2003 Iraq War); anti-submarine torpedoes; and space weapons that can destroy USA Satellite Command and Control.

Russia's Conventional forces are far weaker than those of USA/NATO, but are far stronger than those of the Kiev remnant of Ukraine, so the annexation of Crimea, as well as other areas such as Novorossiya, will succeed unless USA/NATO

intervenes on the side of Kiev. If USA/NATO intervenes, then Russia will take the conflict to the Nuclear level, because Russia's Nuclear forces are comparable to those of USA/NATO (It is the mirror image of the post-1945 Cold War in which the USSR had dominant conventional forces in Europe and the USA doctrine was to go Nuclear.)

Outcome ?

What are the Possible Outcomes of the Confrontation ?

1 - Big 5 Wall Street Banks Win without War: Russian and China give up their sovereignty without Fighting a War, and Big 5 Banks exploit their Finance Capitalist Dominance to fund their 25% return Casino with the Spoils of Victory.

2 - Russia/China Refuse to Lose, setting up an alternative Finance System based on ROSSWIFT and Shanghai with No Derivatives Casino to replace SWIFT and Wall Street with Derivatives Casino.
Big 5 Wall Street Banks do not go to Military War, but the Dollar is effectively Devalued by Money-Printing to support 25% Casino return. To remain competitive with Russia/China, the Big 5 Wall Street Banks are forced to abandon their Derivatives and reduce them to their Net Value of Zero thus wiping out \$295 Trillion of their Nominal Assets and leaving them with \$8 Trillion in Real Assets, which is somewhat less than Chinese Banks \$10 Trillion.
Russia/China then Win the Economic War based on Chinese Manufacturing and Russian Resources.

3 - Russia/China Refuse to Lose, setting up an alternative Finance System based on ROSSWIFT and Shanghai with No Derivatives Casino to replace SWIFT and Wall Street with Derivatives Casino.
Big 5 Wall Street Banks DO go to Military War to avoid Outcome 2, starting with USA/NATO intervention in Ukraine/Novorossiya/Crimea.
Russia, being outclassed in a Conventional War with USA/NATO, hits USA/NATO bases with Nuclear weapons.
USA/NATO responds with Nuclear attacks on Russia.
Russia responds with full Nuclear War with Russia/China.

4 - Russia/China Refuse to Lose, setting up an alternative Finance System based on ROSSWIFT and Shanghai with No Derivatives Casino to replace SWIFT and Wall Street with Derivatives Casino.
Big 5 Wall Street Banks DO go to Military War to avoid Outcome 2, starting with USA/NATO intervention in Ukraine/Novorossiya/Crimea.
Russia, being outclassed in a Conventional War with USA/NATO, goes directly to Full First-Strike Nuclear War against USA/NATO to reduce the damage that Russia/China would suffer in Outcome 3.

Outcomes 1 and 2 require either Russia/China or the Big 5 Banks to give up without a Military War fight, which seems to be inconsistent with Human History, so

most likely is Outcome 3 or 4, both of which lead to NUCLEAR WAR.

Wild Card ? Is there a Wild Card Event that could Change the World and Avoid Nuclear War ?

There is one thing that the Big 5 Wall Street Banks and Russia / China have in common:

Their advanced economies consume a Lot of Energy:

Oil for cars and airplanes. Gas for heating. Coal and Uranium Fission for electricity, distributed by huge PowerLine Grids.

Using total Earth Energy Reserves in Terawatt-years, according to M. Taube, in his book Evolution of Matter and Energy on a Cosmic and Planetary Scale (Springer-Verlag 1985), the number of years that 10^10 people could consume energy at the present USA per capita rate, a consumption rate of about 1,000 Terawatt-years/year, is:

	Reserves	Duration
	(Terawatt-years)	(years)
Oil	850	1
Gas	550	1
Methane	1,500	2
Coal	7,000	7
Uranium	1.9 X 10^9	2,000,000
	(1/1000 of	
	Earth supply)	
Thorium	7.9 x 10^9	8,000,000
	(1/1000 of	
	Earth supply)	
Deuterium	1.9 x 10^9	2,000,000
	(1/1000 of	
	ocean supply)	
Lithium	1.9 x 10^9	2,000,000
	(source of	
	tritium)	

As to solar energy, the total solar energy received by Earth is about 109,000 Terawattyears/year so that 10^10 people could consume energy at the present USA per capita rate by using about 1% (one percent) of the solar energy received by Earth. This could be done, for example, by building a lot of orbiting solar energy collection dishes and beaming the energy to Earth.

The total geothermal heat flux is about 66 Terawatt-years/year, and the total tidal energy is about 3 Terawatt-years/year, so that those sources would be inadequate to support 10^10 people consuming energy at the present USA per capita rate.

Wild Card for Peace = Abundant Cheap Energy

With Abundant Cheap Energy there will be no need for the Big 5 Banks or Russia or China to go to the expense of War in competition for geologically concentrated Cheap Oil



in the Muddled Middle East.

For all parties to feel secure, the Abundant Cheap Energy must provide a high Standard of Living (current USA standard) for a lot of people (10 billion), and:

last for a long time (more than decades) - rules out Oil, Gas, Methane, and Coal;

have no serious radioactive waste - rules out Uranium, Thorium, and Tritium (Lithium);

have realistically scalable capital cost - rules out Solar which would require Satellite collectors with area 1% of pi x $6,000^2 = 1,000,000 \text{ km}^2 = (1,000 \text{ km})^2$ or cloud-free collectors on Earth surface with the same area. Less than 100% efficiency would require correspondingly larger area of collectors.

That leaves one possible source of Abundant Cheap Energy for 10 billion people:

	Reserves (Terawatt-years)	Duration years)
Deuterium	1.9 x 10^9 (1/1000 of ocean supply)	2,000,000

Wild Card !

The Big 5 Wall Street Banks may have broken the Fat Man financially but

he still had his Physics Work, which produced no income but was satisfying.

Over the Web, the Fat Man met a like-minded group of scientists, the California Crew, a diverse group of free-thinkers from Santa Monica, India, China, Argentina, England, Persia, and China Lake.

Santa Monica was the leader of the California Crew, with diverse interests such as:

Geometry of Fundamental Physics: 3-dim geometry of Tetrahedra/Icosahedra; 4-dim geometry of 24-cells and 600-cells and Icosahedral 120-cells; 8-dim geometry of the 240-vertex Witting Polytope and E8 Lattices; Real Clifford Algebras with 8-Periodicity, including Cl(16) as containing E8; and relationships between QuasiCrystals and E8 Lattices.

Prime Numbers and their relationships to the Binomial Triangle of Clifford Algebras.

New Energy Sources such as Dark Energy and Cold Fusion

that could be given Free to the World thus liberating the World Population
as had been suggested by Terence McKenna in a 1993 Omni interview:
"... The world is ... some kind of interdimensional nexus ...
Something in an unseen dimension is acting as an attractor for our forward movement in understanding ... We are at the breakpoint ... What lies ahead is ...
[either] freedom and transcendence ...
[or] scarcity, preservation of privilege, forced control of populations ...".

Santa Monica and Fat Man thought the most direct way to Freedom and Transcendence was Wild Card of Abundant Cheap Energy = = Cold Fusion of Deuterium in Palladium

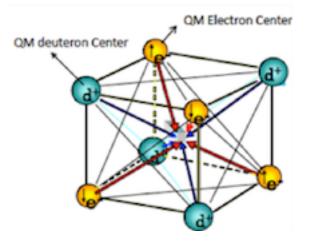
Early experiments by Persia had led China Lake to say that a gram of Palladium properly structured could produce Deuterium Fusion on the scale of Megawatts.

Deuterium-Palladium Cold Fusion

Cold Fusion had a substantial body of experimental work with some positive results indicating a high probability of success if the correct geometric configurations could be found and used, so

Santa Monica and Fat Man decided to focus on testing some possibly useful geometric configurations for Cold Fusion:

Akito Takahashi had shown that a Tetrahedral Symmetric Condensate (TSC)



gives 2D+2D+2D+2D -> 8Be* Fusion in Palladium with no Coulomb Repulsion

and

that 8Be* would mostly decay into 4He+4He plus 46.7 MeV in 1.5 keV soft X-rays.

Santa Monica and Fat Man theorized that **Jitterbug Transformation** between Icosahedral and Cuboctahedral 147-atom Palladium clusters

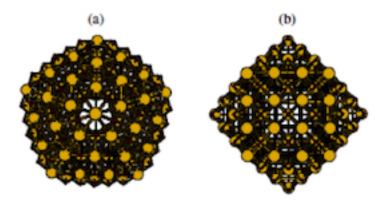


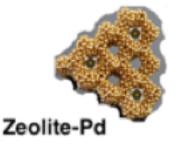
Figure 1. Palladium clusters fully loaded with hydrogen. (a) Pd₁₄₇H₂₀₀, I_h symmetry; (b) Pd₁₄₇H₁₆₄, O_h symmetry.

would replace the Fusion Deuterium with new Deuterium from ambient D gas, effectively reloading the Palladium Cluster for more Fusion, like a Maxim Gun.

In the meantime, Sandy in New Mexico showed how to synthesize 147-atom 1.56 nanometer Palladium NanoClusters

and

Persia experimented with Palladium NanoClusters embedded in Na Zeolite Y Cavities



and exposed to Deuterium gas, obtaining positive results for heat production

so

the California Crew began a series of experiments to show how to produce heat

from TSC-Jitterbug Pd-D Cold Fusion.

Steam Engine

Heat produced by TSC-Jitterbug Pd-D Cold Fusion needs to be converted into

useful form. In additional to the conventional approach of using heat exchangers to produce Steam, the California Crew explored two unconventional approaches, based on the special properties of Zeolites,

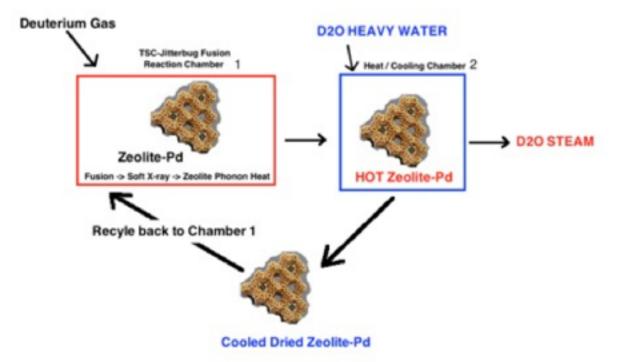
that could convert the Heat into useful Energy more efficiently.

Their first approach uses the process **Heated Zeolite + Water -> Steam**.

According to a 7 June 2012 techthefuture.com web article by Tessel Renzenbrink: "... Zeolite is a mineral that can store up to four times more heat than water ... zeolite retains a hundred percent of the heat for an unlimited amount of time ... When water comes into contact with zeolite it is bound to its surface by means of a chemical reaction which generates heat. Reversely, when heat is applied the water is removed from the surface, generating large amounts of steam.

The transference of heat to the material does not cause its temperature to rise. Instead, the energy is stored as a potential to adsorb water. The ...[German Fraunhofer Institute]... created a ... thermal ... storage device and filled it with zeolite pellets.

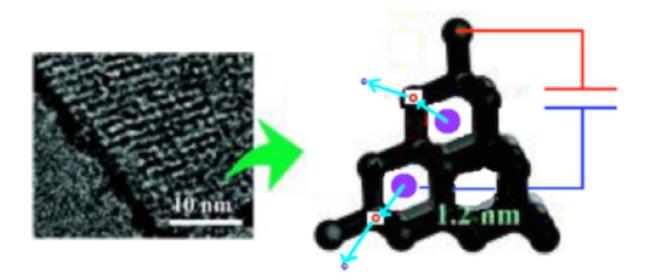
To charge the pellets, they exposed them to heat. To retrieve the energy they simply added water. ...".



D2O Heavy Water is used to take heat from the Zeolite to make steam so that Hydrogen from H2O does not poison the TSC-Jitterbug process by replacing Deuterium in the Palladium nanoclusters.

ZTC Electric Capacitor

The California Crew's second unconventional approach to conversion of Heat produced by TSC-Jitterbug Pd-D Cold Fusion into useful form uses Zeolite-Templated Carbon (ZTC) as UltraCapacitor.



Zeolite-Templated Carbon framework is Black, Palladium NanoClusters are Purple, Ambient Fluid with Deuterium for TSC-Jitterbug Reloading is White, Soft X-Rays from TSC-Jitterbug Fusion are Cyan arrows that ionize parts of the Zeolite, ejecting electrons (Blue) into the Ambient Fluid and leaving positive ions (Red) in the Zeolite-Templated Carbon thus building up a Capacitance Voltage between the Zeolite-Templated Carbon and the Ambient Fluid.

According to a 26 January 2011 PhysOrg.com article by Lisa Zyga: "... The unique 3D array of nanopores in zeolite-templated carbon enables it to be used as an electrode for high-performance supercapacitors that have a high capacitance and quick charge time ... The zeolite-templated carbon consists of nanopores that are 1.2 nm in diameter ... and that have a very ordered structure ...". Synthesis of Zeolite-Templated Carbon is described in the 2013 Caltech Ph.D. Thesis of Nicholas Stadie "... Zeolite-templated carbon (ZTC) materials were prepared ... by ... established methods ...

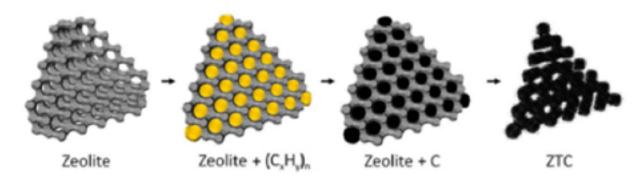


Figure 4.1. A schematic of template-carbonization in a porous zeolite framework, to produce zeolite-templated carbon (ZTC).

...".

The ZTC capacitor process converts TSC-Jitterbug fusion energy directly to electricity. Since it does not require the Zeolite-heat-water-steam chemical structure only the Zeolite Y Crystal geometric configuration is needed so all the Zeolite Y can be converted to ZTC carbon configurations attached to a single carbon substrate base that acts as a Capacitor Electrode.

This overcomes the difficulty of using separated Zeolite Y Crystals as an electrode at the cost of the ZTC having fewer Exterior Cavities than the free-floating Zeolite Y Crystals because each tetahedral structure is attached to the carbon substrate by a base face, thus eliminating 1/4 of the Exterior Cavities.

Useful Engines

Since a gram of Palladium properly structured could produce TSC-Jitterbug Pd-D Cold Fusion Energy on the scale of Megawatts the California Crew could construct

a wide range of convenient TSC-Jitterbug-Zeolite Pd-D Fusion Energy Machines:

1 milligram of Palladium gives a 1 kiloWatt Machine, useful for "electric motors, tools, machines and heaters" (Wikipedia) Such small energy machines could use the ZTC Electric Capacitor technology.

1 gram of Palladium gives a 1 MegaWatt = 1340 HorsePower Machine,

useful for "large electric motors; large warships such as aircraft carriers, cruisers, and submarines; large server farms or data centers; and some scientific research equipment such as supercolliders, and the output pulses of very large lasers. A large residential or commercial building may use several megawatts in electric power and heat. ... railway... electric locomotives ... typically have a peak power output of 5 or 6 MW, although ... Eurostar ... uses more than 12 MW,

while heavy diesel-electric locomotives typically produce/use 3 to 5 MW ..." (Wikipedia) C-130 aircraft have 4 engines each with 4300 HorsePower (globalsecurity.org)

so would need a 4 x 4300 / 1340 = 13 grams of Pd

Such mid-sized energy machines could use, depending on portability and site requirements, either Zeolite Steam or ZTC Electric Capacitor technology.

1 kg of Palladium gives a 1 GigaWatt Machine,

useful for "large power plants ... HVDC converters have been built with power ratings up to 2 GW" (Wikipedia)

Such machines could use either Zeolite Steam or ZTC Electric Capacitor technology, using HVDC converters up to 2 GW to convert the ZTC Electric Capacitor DC into AC.

1,000 kg = 1 ton of Palladium gives 1 TeraWatt.

The total power used by Humans in 2006 was 16 TW.

The average lightning strike peaks at 1 TW, but lasts only 30 microseconds.

Powerful 20th century lasers produce TW, but only for nanoseconds. (Wikipedia)

1,000 tons of Palladium gives 1 PetaWatt.

The Lawrence Livermore Nova laser has power of 1.25 PW in a 5x10⁽⁻¹³⁾ sec pulse. The total power of sunlight hitting the Earth is about 174 PW. (Wikipedia)

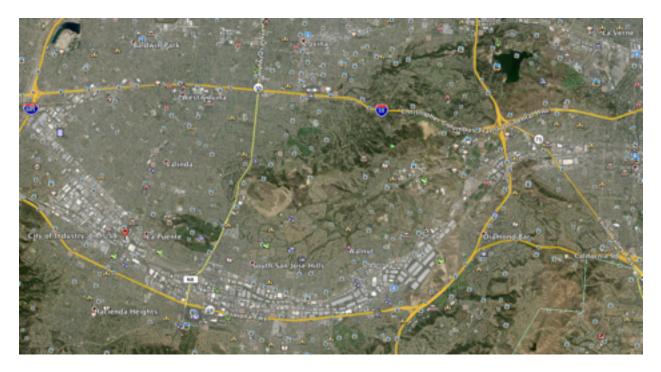
222 tons of Palladium were mined world-wide (based on 2006 and 2007 data, Wikipedia):

Russia produced 98 tons South Africa produced 89 tons Canada produced 13 tons USA produced 11 tons the rest of the world produced 11 tons

City of Industry

Hollywood Glitz and Malibu Beaches are indeed part of Los Angeles but

LA is a city in a desert that cannot exist without Industrial Engineering to provide necessities of life such as Water, Power, and Transportation, and the core of Industrial Engineering in LA is the City of Industry



where the California Crew can consistently find engineers who can build the components needed for TSC-Jitterbug-Zeolite Pd-D Fusion Energy Machines of all sizes and types.

Machine Revolution

After the California Crew has distributed freely and world-wide the technology for a wide range of TSC-Jitterbug-Zeolite Pd-D Fusion Energy Machines, there will be Revolutionary Change of the Rules of the Game of Human-Human conflict between the Big 5 Wall Street Banks and China / Russia :

Cars, Trains, Ships, Airplanes, Houses, Towns, Cities, Factories, Mining, Sea Water Desalting and Deuterium Extraction, and Distribution of Fresh Water can all be powered by Fusion Energy Machines for a Human Population of 10 billion.

China will see that their entire population can be given a High Standard of Living so that there will be no need to fear Rebellion by an Unhappy Discontented Population. Therefore,

China will immediately make the necessary Capital Investment in TSC-Jitterbug-Zeolite Pd-D Fusion Energy Technology.

Russia (and the Muddled Middle East) will see a sharp drop in Oil/Gas sales, and so may initially be hostile to TSC-Jitterbug-Zeolite Pd-D Fusion Energy Technology but

Russia will most likely see the long-term benefit to its entire population

and decide to also make the necessary Capital Investment,

particularly considering the fact that if Russia does not do it, since China certainly will, China will supply the Machines to Russia

and effectively turn Russia into a Chinese Colony.

The Big 5 Wall Street Banks, being closely aligned with Western Energy Companies such as Big Oil and Power Companies with Power Plants and PowerLine Grids, will be most hostile to TSC-Jitterbug-Zeolite Pd-D Fusion Energy Technology, but

once TSC-Jitterbug-Zeolite Pd-D Fusion Energy Technology has been distributed freely and world-wide and then produced by any other country (most likely China at first) the Big 5 Banks will have to provide capital and wages to produce Machines in the USA or watch China bring the Machines into the USA, making it a Chinese Colony.

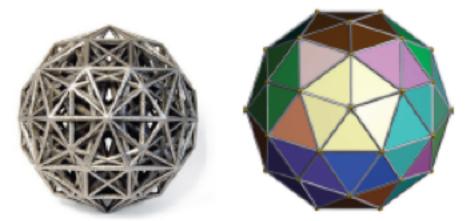
Chinese marketing of TSC-Jitterbug-Zeolite Pd-D Fusion Energy Machines in the USA over the objection of the Big 5 Banks would be Ultimate Revenge for the Opium Wars of almost 200 years ago.

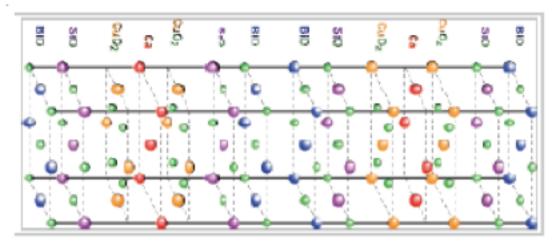
Second Revolution: Dark Energy

In his discussions with Santa Monica, the Fat Man had proposed two possible paths to Freedom and Transcendence: **Cold Fusion** and **Dark Energy.**

Dark Energy experiments would be a big stretch from existing experimental work, and, relative to Cold Fusion, have high risk and low probability of success but after Cold Fusion has raised the Standard of Living of 10 billion people, there should be ample Talent and Capital to explore the possibilities.

Dark Energy would require experimenting with 600-cell and Icosahedral 120-cell geometry





using BSCCO superconducting Josephson Junction Crystals.

Success in understanding and controlling Dark Energy would be much like the power of Tetsuo in the manga Akira:



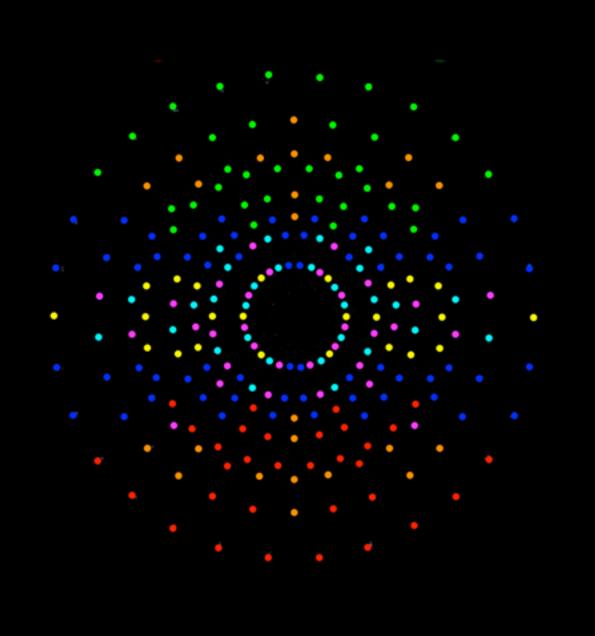
Control of Dark Energy might allow construction of

Real Star Gates and Warp Drives

and also show how

Zizzi Quantum Consciousness of Our Universe is connected to Human Quantum Consciousness







This is a Fictional Story in Three Parts:

LIFE

SCIENCE of the UNIVERSE

HISTORY of EVERYTHING

It is dedicated to Gerald Massey - here are excerpts from his last poem:

For Truth

... he fought for Truth, whose likeness was to him revealed ... but found ... The World against him, with its ranks all closed: He fought, he fell, he failed to win the day

But ... Victory ... came ... another way.

For Truth, it seemed, in very person came ... men caught a glimpse ... And turned to follow ... as if they had been Her champion from the first ... and he who had led Was left behind ... forgotten ... dead.

There is a Gerald Massey web site at

http://www.gerald-massey.org.uk/

Further material (not as much as in Borges's Book of Sand, but still several thousand pages worth) about some of the subjects mentioned in this fictional story can be found in the web sites at

http://www.valdostamuseum.org/hamsmith/ http://www.tony5m17h.net/

Cover Image - 240 of 256 elements of Unified Theory of Everything

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LIFE - PROLOGUE

Bill Hartsfield lost the 1941 Atlanta mayor race to Roy LeCraw, who had promised to volunteer for the US Army if war broke out. In 1942, the USA was in World War II, and LeCraw resigned as mayor to fulfill his promise, so Bill Hartsfield came back in to serve as Atlanta mayor from 1942 to 1962, making ATL the air hub of the southeastern USA, annexing the Buckhead suburbs, helping the Atlanta metro area to grow to a million people, and seeing to it that Atlanta was "the city too busy to hate".

Atlanta was an open business community whose business leaders did not tolerate racial intolerance, but some small towns in the area were not that way.

In the early 21st century, the Atlanta metro area grew to 5 million people, changing the character of some of those small towns.

This is a story about one such small town - Crackerville.

The last lynching of the 20th century in Crackerville was of a black Hanged Man who had been charged with murder of a white Crackerville Chief of Police.

Was Life in 21st century Crackerville really very different?

LIFE - 1 - The Chief has Got to Go

The Fat Man was doing what he enjoyed - eating a steak - when a friend of his stopped by his table to say:

"The Chief has got to go."

"Why?"

"Haven't you seen what he's done? It's all over the web and pamphlets all over town."

"No. What is he supposed to have done?"

"Here - just read this pamphlet."

"Who wrote it?"

"Who cares? Look at what it says."

The Anonymous Pamphlet said:

"Crackerville's Yankee City Manager gave in to NAACP pressure to hire a black as The Chief of the Crackerville Police Department.

The Chief bought police cars without bids and paid friends to install lights and sirens on them.

The Chief misappropriated drug seizure money and property.

A policeman who violated department rules was punished by reprimand rather than termination, at the order of The Chief.

Not only is The Chief black, but - he is from Atlanta."

The charge "he is from Atlanta" brought a deja vu feeling to the Fat Man. Back in the 20th century, during some of his law school days, Fat Man took classes at night and worked during the day in the Crackerville office of an Honest Lawyer. (Yes, they exist, even though now in the 21st century they seem to be an endangered species.)

The Honest Lawyer had been associated with Atlanta Lawyers in defending the black Hanged Man who had killed a white Crackerville Police Chief.

LIFE - 2 - Yellow Rose to Texas

Back in the 20th century:

Yellow Rose's husband was out of town, so she had trouble falling asleep even though it was late at night. She knew that one of the white men would see that she was alone, and would follow his urges.

Sometimes she felt guilty. It was all her fault that she was the sexiest woman in Crackerville, with a stacked figure and beautiful dark skin.

Sure enough, a car pulled up. This time it belonged to the Big Boss, the white Chief of Police of Crackerville.

Big Boss's gun was throbbing inside Yellow Rose when her husband surprised them. Big Boss tried to shoot her husband but his blood had gone from his brain so he fumbled his Smith & Wesson, which the husband fought for. In the struggle, Big Boss was killed by his own gun.

Yellow Rose's black husband knew that he would soon be the Hanged Man, so he ran.

Yellow Rose also knew that she had to leave, so she moved to Texas.

LIFE - 3 - Guilty of being a Black Man from Atlanta

The specific charges in the Anonymous Pamphlet:

buying police cars without bids,

having friends install lights and sirens on them,

misappropriation of Drug Seizure money and assets, and

ordering disciplinary reprimand instead of termination

could be checked out directly by the Fat Man.

The Fat Man lived across a Side Street from The Church, and he often went aross the street to talk with The Pastor of The Church.

The Pastor, who was a friend of The Chief, told the Fat Man that the three of them could meet, and the Fat Man could ask The Chief directly about the specific charges.

The Chief, using the Crackerville Police records, clearly showed that no cars had been bought without bids (and therefore no lights and sirens had been installed on any such cars by friends of The Chief) and that all Drug Seizure assets and money had been properly handled in accord with all regulations including those of Federal DEA.

As to punishment of an errant policeman by reprimand rather than termination, The Chief showed that the decision to reprimand was, in accord with department procedure, done by the Supervisor of the errant policeman and that it was a normal level of punishment for such infractions. The Supervisor agreed with The Chief.

Further, it was clear that The Chief had not used NAACP pressure to get the job, although it did appear that, after the Yankee City Manager had selected The Chief as the best qualified applicant for the job, he had then asked some Crackerville black folks whether they approved his choice of The Chief for the job. They had said that they were OK with the choice.

The only charge of which The Chief was guilty was that he was a black man from Atlanta.

LIFE - 4 - Drug Dealers

Since the specific allegations of the Anonymous Pamphlet were obviously false, the question was:

Would a Consensus of Crackerville get rid of The Chief based on the fact that The Chief was a black man from Atlanta,

using as a pretext obviously false charges in an Anonymous Pamphlet ?

In other words:

Did the Anonymous Pamphlet People represent the Consensus of Crackerville?

Who were the Anonymous Pamphlet People?

The Chief, being black and from out-of-town, was from day one targeted by white racists of Crackerville and some policemen who resented a police chief not hired from within Crackerville, but his serious police work was putting him in the cross-hairs of new enemies.

When The Chief arrived in Crackerville, he found:

some neighborhoods controlled by drug dealers; and

a white-folks Consensus that drug-infested neighborhoods were OK as long as they were outside of the affluent white neighborhoods (sort of like the line in the Godfather movie

"... In my city, we'll keep the traffic in the dark people, the colored. ..."); and

a good-old-boy police department that did not care as much about serious police work as about keeping the white Consensus folks content.

The Chief believed that all neighborhoods deserved police protection from drug dealing criminals, so he did away with the good-old-boy approach and ordered serious police work cracking down on the drug dealers.

Within a few years, the drug dealers got the word:

Stay outside the Crackerville City Limits if you want to do drug deals!

and ALL the neighborhoods were being cleansed of drug-dealer infestations.

The Chief had earned two new sets of enemies:

- 1 drug dealers who had lost their markets inside the Crackerville City Limits;
- 2 policemen who had been in bed with the drug dealers.

Could they, along with the resentful local policemen and white racists, form a Consensus of Crackerville to get rid of The Chief?

LIFE - 5 - City Council

Crackerville had a business community, but it was not an Atlanta-type open community that welcomed new ideas and new leadership.

It was a Birmingham-type closed community whose Consensus was to fight to preserve the Status Quo.

21st century Crackerville was governed by a City Council with six members:

Three of them, the Consensus Three, were white folks who supported conformity to Consensus and wanted to get rid of The Chief.

One was a Black Councilman who thought for himself.

One was a white Single Mom lawyer who, when she won \$20 million in the lottery, moved from her large Atlanta law firm to Crackerville so that she could raise her children in a small town.

One was a white Retired Rector who, back in the 20th century as Rector of the local Episcopal Church, had been active in public support of peaceful integration of the Crackerville public schools.

As long as the Consensus Three could get at least one of the other votes, they controlled the Crackerville government.

They wanted to Lynch The Chief, using Rumors instead of Ropes, and they needed one more vote from the Crackerville City Council to do it.

The Consensus Three thought that it would be hard to get the Black Councilman to vote to Lynch The Chief, and they only needed one more vote, so they did not make much of an effort to get his vote.

They were also uncertain about the Retired Rector, because of his 20th century support of peaceful integration of the Crackerville schools.

They thought that they had a good chance to get the vote of the Single Mom.

LIFE - 6 - Single Mom

When the Consensus Three approached the Single Mom, they ran into a problem. Single Mom was a smart lawyer, and she could see that the Anonymous Pamphlet charges about no-bid car purchases and drug seizure asset misappropriation were False Rumor Lies, and she did not think that being black or from Atlanta should disqualify anyone from being Crackerville Chief of Police.

As to having used a reprimand rather than termination for discipline, and as to having used NAACP influence to get his job, it was the word of The Chief (and the Supervisor in the reprimand matter) against an Anonymous Pamphlet full of False Rumor Lies.

The Consensus Three insisted that the word of The Chief was questionable, but the Single Mom thought that it should stand against an Anonymous Pamphlet full of Lies.

LIFE - 7 - Puppet Inquisitor

Being unable to convince the Single Mom to go along with Lynching The Chief by Rumor, the Consensus Three called for an investigation by an Outside Investigator to report to the City Council on the charges of the Anonymous Pamphlet.

The Consensus Three picked an Outside Investigator who was in fact an Inside-Their-Pocket Puppet. The Puppet Investigator became the Puppet Inquisitor, ignoring clear statements by The Chief and The Supervisor and accepting (unless prevented by irrefutable facts such as auto purchase records and Drug Seizure records) the Anonymous Lies as Gospel Truth.

At closed City Council meetings, the Single Mom objected to the Puppet Inquisitor's insertions of opinions rather than facts into his report, but the Puppet Inquisitor had the support of the Consensus Three, and ignored the Single Mom.

LIFE - 8 - Not in the Family

When it was clear that the Puppet Inquisitor was acting as a Prosecutor instead of an Investigator, The Chief asked Fat Man to represent him.

When the Fat Man, as The Chief's lawyer, tried to discuss the matter with some of the Consensus Three, they told the Fat Man:

"The City of Crackerville is a family, and you are not a member.

You cannot be there when we grill The Chief, and you cannot attend City Council meetings where we discuss the investigation with the Puppet Inquisitor."

LIFE - 9 - Retired Rector

The Single Mom's independence worried the Consensus Three, so they decided to concentrate their efforts on the Retired Rector.

Since the Retired Rector was proud of his pro-civil rights image, the Consensus Three did not directly say that The Chief should go because he was black and from Atlanta.

However, the Retired Rector did not like The Chief. It was a fundamental difference:

The Retired Rector thought that local Crackerville businesses should be preferred when bids went out from any City of Crackerville department, such as when the Police Department took bids for carpeting etc.

The Chief thought that his job was to professionalize the Crackerville Police Department, and get away from a goodol-boy buddy system, so The Chief thought that local Crackerville businesses should not get any preferred treatment with respect to the bidding process.

That fundamental difference, and the dislike of The Chief that it produced in the Retired Rector, gave The Consensus Three an opening to seduce the Retired Rector by using a disingenuous passive-aggressive approach, saying that, of course The Chief should not go because of being black or from Atlanta, but that the climate of the community in general, and of the Police Department in particular, was such that The Chief would be ineffective as a leader.

When The Chief heard of that line of attack against him, he put it to the City Council:

The primary reason for the adverse climate of the community and the Police Department is the widespread circulation of the Lies of the Anonymous Pamphlet and the failure of the City Council to denounce the Lies, and

the failure of the City Council to speak out against the Anonymous Lies, if it continues, will probably eventually make it impossible for The Chief to effectively lead the Crackerville Police Department,

so The Chief requests the City Council to pass a resolution denouncing the Anonymous Lies.

If the Crackerville City Council were to pass such a resolution, then The Chief would have a fair chance to lead the Police Department and continue his reforms, including cracking down on drug dealers.

The Consensus Three themselves had enough votes (three out of six) to keep such a resolution from passing directly, but a tie vote would throw the resolution decision to the Mayor, a bank officer in a local branch of a large national-scale bank.

They were afraid that the Mayor might be fair-minded because of what happened soon after he took office and noticed a photograph that had long been traditionally hanging in the room in Crackerville City Hall where the City Council held its private Family meetings, such as those from which the Fat Man had been excluded.

At first glance, the photograph seemed to be of a happy cheering crowd in downtown Crackerville, and indeed it was. However, when the Mayor looked closely, he saw that the happy cheering crowd was looking up at the hanged corpse of a Lynched black man (not the Lynching of the black Hanged Man, but a previous Crackerville Lynching, about the time of World War I). The Mayor was embarrassed and horrified and took the photograph down. Therefore the Consensus Three did not trust the Mayor to side with them in Lynching The Chief using Anonymous Lies, so they decided to put a lot of pressure on the Retired Rector to defeat the resolution directly, 4 to 2.

The Consensus Three seduced the Retired Rector by:

de-emphasizing the black man from Atlanta aspect of the situation and playing to the Retired Rector's dislike of The Chief's failure to give peference to local businesses; and

telling the Rector that the only sure way to get rid of the controversial atmosphere in Crackerville and its Police Department was to get rid of The Chief (that is, by ignoring the possibility that The Chief could succeed if he were to be backed by a City Council resolution denouncing the Anonymous Lies); and

by appealing to the Retired Rector's status as a Member of the Family of Crackerville's Elite.

LIFE - 10 - Orderly Lynching by High Class People

When the black Hanged Man was caught and charged with murder of white Big Boss, his lawers, three from Atlanta and the Honest Lawyer, moved for a change of venue to Atlanta, but the Judge refused. The Defense Lawyers appealed. The Judge ordered that the Hanged Man was to be held in the Crackerville jail.

That night, while the Crackerville Sheriff was pretending to be asleep, a Lynch Mob found the jail open and took the Hanged Man to the Fair Grounds.

The next day, a white citizen of Crackerville told the Honest Lawyer:

"Your appeal is a-hanging from a Fair Grounds light-pole."

The Judge declared that he was proud that the Lynch Mob was Orderly and made up of High Class People.

The County Commissioner blamed the Lynching on the Atlanta Lawyers, saying that their change of venue motion and appeal so incensed the people of Crackerville that the Lynching met with Unanimous Approval.

Most of the white folks of Crackerville had formed a Consensus opinion:

The Atlanta Lawyers defending him were interfering with a quick conviction and electrocution, making the Lynching necessary to teach black folks to stay in their place. To make sure that the black folks got the message, picture postcards of the hanging would be distributed around Crackerville and other towns in the area.

Now in the 21st century the Crackerville Consensus was that The Chief - being a black man from Atlanta - should be also be Lynched, but this time with Rumors instead of Ropes.

LIFE - 11 - Lynching The Chief with Rumors

Successful seduction of the Retired Rector by the Consensus Three would effectively be a Lynching of The Chief by the High Class People of Crackerville by Rumors - the Lies of the Anonymous Pamphlet - instead of Ropes.

As Episcopal Rector of Crackerville, the Retired Rector had formed close social friendship ties with the rich white folks who considered themselves to be Crackerville's Elite. He so highly valued being such a Member of the Family of Crackerville's Elite that he convinced himself that:

his dislike of The Chief was not based on race, it was only a matter of what is good for Crackerville, and

what was good for Crackerville was Peace and Quiet and a smoothly running City and Police Department with no controversy, and

quickly getting rid of The Chief was the best way to get peace and quiet,

so the Retired Rector convinced himself that Lynching The Chief was Good for Crackerville.

The Retired Rector joined the Consensus Three.

The Chief was forced to resign with a year's pay as severance.

The Crackerville Police Department went back to its old ways,

undoing the reforms put in by The Chief.

The Consensus Three and the Retired Rector got their Peace and Quiet in Crackerville:

the Peace and Quiet of the aftermath of a Lynching.

The Lynch Victims included Truth and Justice.

LIFE - 12 - You have GOT to Change your Will

An Anonymous Message from a disposable cell-phone to Fat Man's voice-mail:

"You have GOT to change your will.

You know the Church will NEVER get bank financing for expansion.

Leaving your house and lot to the Church is Futile."

Post-World War II Crackerville was on the way between Florida and the MidWest, so a Roman Catholic Church was built on a Main Street through town, at the corner with a Side Street, for travelers' Mass.

Affluent white folks lived in the houses that fronted on that stretch of Main Street.

Behind the Main Street frontage houses on the side opposite the Church, for several blocks, lived a neighborhood of affluent white folks.

Behind the Main Street frontage houses on the same side as the Church, for several blocks, lived a neighborhood of black folks.

Therefore, the Church was like a bridge between an affluent neighborhood and a black neighborhood.

Even though, as a Roman Catholic Church, the Church congregation was predominantly white, it was resented by some of Crackerville's affluent white folks, even to the point that some white non-Catholic churches preached that it was a heinous sin to call a Catholic Priest "Father".

It is true that the Roman Catholic Church had a less-than-perfect history, some elements of it having attempted to suppress works of people such as Ramon Llull, Galileo, and Giordano Bruno, but it also had a history of doing some extraordinarily good works. In the Crackerville area during the decade following World War II, if a black man were dying of cancer, none of the established white hospitals or hospices would accept him. However, a Roman Catholic hospice would take him in, no matter what his religion or race might be.

As decades passed, more and more Roman Catholics lived around Crackerville, and they built a new larger church, selling the original traveler's Church.

The Church was bought by a black congregation.

It was the first black presence fronting on that part of Main Street.

LIFE - 13 - Black Pastor from Atlanta

As the 21st century began, The Pastor of The Church was a black man from Atlanta.

The Pastor had not always been a preacher. As a microbiologist, he worked for a pharmaceutical company testing drugs for FDA approval. When a company MBA manager ordered him to omit some tests, he knew that the company knew that the results of those tests would have shown the drug being tested to be unsafe. Faced with a crisis of conscience - suppress knowledge of dangers of the drug, or lose his job - he prayed with his pastor, who told him that his conscience was too strong for him to help the company make money at the expense of lives, and that such a strong conscience was really a calling of him to the ministry. After apprentice work in Atlanta, The Pastor was called to The Church in Crackerville.

Under The Pastor, The Church had grown to about 300 members, and parking on the Side Street was blocking a fire plug near a house across the Side Street.

LIFE - 14 - Turning Buckhead into Bankhead

Fat Man owned the house across Side Street from The Church. He wanted to alleviate the parking problem and keep the fire plug clear, so he suggested to The Pastor that some of his yard near Side Street might be used for parking.

Shortly thereafter, The Chief told The Pastor that Church parking on Side Street should be eliminated because it was blocking a fire plug. The Pastor agreed, and with the Fat Man went to Crackerville City Hall to find out how part of the Fat Man's yard might be used to alleviate the Side Street parking problem. Fat Man got a permit from the City of Crackerville, and paved some additional driveway area and agreed for Church parking without blocking the fire plug.

As proof of the principle No Good Deed Goes Unpunished,

Fat Man received complaints from some white folks of Crackerville that by helping The Church he was

Turning Buckhead into Bankhead

(note for out-of-towners - Buckhead is an affluent mostly white neighborhood of Atlanta, while Bankhead is a poor mostly black neighborhood of Atlanta.)

The first such complaint came on a Saturday night when Fat Man was at home, just after the driveway paving had started.

A City of Crackerville employee telephoned Fat Man, accused him of Turning Buckhead into Bankhead, and told him that he could not use his driveway for parking because the City of Crackerville had an Ordinance prohibiting parking in front yards. When Fat Man replied that his driveway was on his side yard, the Crackerville employee said that since Fat Man's house was on a corner lot it had two front yards, and that "we use that Ordinance to keep them Hispanics in line".

Those complaints marked the first time that Fat Man began to realize the level of bitter opposition by Crackerville Consensus white folks to a predominantly black Church being situated like a bridge between an affluent white neighborhood and a black neighborhood :

The Crackerville Consensus had not changed so much from the Crackerville Consensus attitude toward the 20th century Lynching of the black Hanged Man.

Even though Fat Man knew how bad things were back then, somehow he had been in denial that things could still be so bad. Maybe that denial was facilitated by Fat Man's devotion of most of his spare time to trying to understand Nature through Science using the language of Mathematics, and

trying to understand the history of human societies and religions and how they were all interrelated with each other.

By focussing on such bright things, he looked away from dark facets of human nature such as racist Lynching and the stuff of the novels of Andrew Vachss (see <u>http://www.vachss.com</u>).

LIFE - 15 - Zoning Board

While Anonymous Rumors were being circulated against The Chief, and the Fat Man was extending his driveway,

the Church was growing, so The Pastor applied to the Crackerville Zoning Board for the Church to expand its buildings.

After discussing plans with the staff at Crackerville City Hall, The Pastor and members of The Church went to the Zoning Board meeting. Since the City of Crackerville had granted Fat Man's permit for driveway extension, The Pastor and the members of The Church expected quick approval of their expansion plans. What happened was shocking:

ALL of the people living in the Affluent White Area that fronted on Main Street near the Church and behind Main Street on the side opposite the Church (except for 3 households: those of Fat Man, another honest lawyer, and a 4077 MASH doctor) had signed a petition Objecting to expansion of the Church, but the White Racist Objectors had kept the petition of Objection secret from The Pastor and Church members;

The White Racist Objectors who spoke at the Zoning Board Meeting represented themselves as a Neighborhood Organization and complained that it had not been consulted by The Pastor or Church members, even though in fact no such organization existed and no effort had been made by the White Racists to discuss expansion plans with The Pastor or Church members;

The Crackerville Zoning Board, unanimously (even including its token black member) backed the White Racists and loudly criticized The Pastor and members of The Church members for not having consulted the non-existent Neighborhood Organization.

Having been blind-sided by the White Racist Objectors, The Pastor and Church members were unprepared to respond, and asked for some time to consider the Objections.

At least the Zoning Board did grant some time, but the blind-side attack was further evidence that:

The Crackerville Consensus had not changed so much from the Crackerville Consensus attitude toward the 20th century Lynching of the black Hanged Man.

In fact, the opposition to The Pastor and The Church of the token black on the Zoning Board seemed a lot like what happened during the Lynching of the black Hanged Man:

Many of the so-called Leaders of the Crackerville Black Community would not take a stand against the Lynching because they were afraid of the Consensus of the white folks of Crackerville.

All this made clear that the Crackerville Consensus White Racists were passionately opposed to a multiracial, heavily black, Church being situated like a bridge between an affluent white neighborhood and a black neighborhood.

To fight back, The Church and The Pastor:

presented a petition of a similar number of neighbors and friends of The Church (multiracial, but mostly black) in support of expansion of The Church; and

showed the Zoning Board that the Federal Religious Land Use ... Act prohibited treating The Church differently from any other church in Crackerville, and that other churches in Crackerville had done or were doing the similar things to what The Church would do by expansion; and

brought in the NAACP to show that, if the Crackerville Zoning Board attempted to Lynch The Church by voting to prohibit its expansion, the NAACP would demonstrate to the nation and the world the true nature of Crackerville.

Confronted with and equally numerous petition, and clear Federal Law, and the possibility of unfavorable national and world-wide notoriety, the Crackerville Zoning Board unanimously voted to grant The Church permission for expansion.

So, if anyone tells you the NAACP is obsolete in today's 21st century USA, please correct them by telling them the story of The Church and the Crackerville Zoning Board.

LIFE - 16 - Lynching The Church - Redlining instead of Ropes

The Zoning Board vote was only one obstacle thrown up against the Church by the White Racist Consensus of Crackerville.

The Church could not be expanded without access to financing, and the White Racists were well connected in the banking community.

The Pastor went to a Crackerville branch of a Big Atlanta Bank, presented expansion plans, financial data, and membership growth projections. The Big Atlanta Bank Crackerville branch managers told The Pastor that they would study the plans, data, and growth projections, and get back to him about what they could do with respect to financing.

After several months of waiting to hear, but not hearing, from the Big Atlanta Bank Crackerville branch managers, The Pastor contacted managers from the Atlanta office of the Big Atlanta Bank.

The Pastor was shocked to be told that his plans, data, and growth projections might well justify financing the expansion, *but* the Atlanta managers would have a hard time getting final approval of Big Atlanta Bank expansion financing *because it had already been rejected by the Crackerville Branch Managers*.

Since The Pastor had never even made an application for a loan from the Crackerville Branch of Big Atlanta Bank, it was clear that the White Racist Consensus of Crackerville was using its influence to block any bank financing of Church expansion by using Racial Redlining.

The Pastor and The Church were being Lynched by Redlining instead of Ropes.

BuyOut ???

When Big Atlanta Bank was caught red-handed trying to red-line The Church against getting financing for expansion, it had two choices:

1 - Continue to fight against The Church getting financing, thus causing The Church to sue Big Atlanta Bank for red-lining and punitive damages which might well amount to over \$5 million, not to mention adverse publicity about Big Atlanta Bank racial bias;

2 - Loan The Church a bit over \$2 million for expansion.

For home-office executives of the national headquarters of Big Atlanta Bank, the choice was a no-brainer:

Even if The Church never repaid the loan, it was a lot less expensive to make the loan than to risk punitive damages and nation-wide adverse publicity.

In fact, just making the loan would give Big Atlanta Bank favorable national publicity worth a good bit more than the loan itself.

When the White Racist Crackerville Consensus had set up the phone call telling the Fat Man that he had to change his will, they were thinking that their use of local Crackerville branch Big Atlanta Bank people to red-line The Church against getting financing for expansion was successful.

The Fat Man knew that the home-office executives of the national headquarters of Big Atlanta Bank would most likely overrule the local Crackerville red-liners,

and

that when the White Racist Crackerville Consensus would realize that their attempts to use local Big Atlanta Bank Crackerville branch people to red-line The Church against getting financing for expansion had backfired,

so

Fat Man contacted a Trusted Realtor who had connections with the White Racist Crackerville Consensus with a proposition by which the White Racist Crackerville Consensus might eradicate any black presence on Main Street in the Neighborhood of The Church:

1 - the White Racist Crackerville Consensus would have to make an offer, on the order of tens of millions of dollars;

2 - the Trusted Realtor should get a good commission, to be paid by the Whirte Racist Crackerville Consensus, with any offer amount to be net, not including any such commission;

3 - if the offer were enough to interest the Fat Man, he would discuss with The Church the possibility that the White RacistCrackerville Consensus would buy The Church (about 3 acres) and the residence of the Fat Man (about 4 acres), with The Church and Fat Man deciding among themselves how to divide the offered money;

4 - both Fat Man and The Church would have to agree, and neither were certain whether or not they would agree, but Fat Man would, if the amount offered were large enough to interest him, discuss the matter with The Church and let the Trusted Realtor know their response.

When the Trusted Realtor told the White Racist Crackerville Consensus people about the Fat Man's proposition, they formed a Committee with Big Boss's grandson as Spokesman.

The Spokesman resided on the white side of the Main Street Neighborhood, and was active in opposing any black presence on Main Street, but the Spokesman did not have the kind of money that would be needed to make an offer.

JR had more than enough money, lived on Main Street in the Neighborhood, and was a charter member of the White Racist Crackerville Consensus.

When JR agreed to be on The Committee, it became serious.

JR

In the 1980s USA TV show "Dallas", JR was a Texas Oil man.

To get Oil, you had to drill deep holes.

To drill deep holes, you needed Mud to lubricate the drill bit.

For the Mud to sink deep down to the drill bit in the bottom of the hole, the Mud had to be heavy-dense. The heaviest-densest material for Mud was Barytes (named for the Greek word "barus" meaning heavy).

Before World War I, all the Barytes in the world came from German mines in South America. During World War I, the USA was cut off from German Barytes, so the USA had to find other sources or lose its Oil industry.

Barytes was found in Crackerville, so Crackerville's JR came from Texas, married into a family owning big Barytes deposits, develped them skillfully, and became the leading businessman in Crackerville.

At the same time of World War I, a Bad Black Man had broken into the home of a white woman whose husband was away and attacked the white woman. She tried to defend herself, shooting the Bad Black Man in his wrist with her revolver, but he overpowered her. He was arrested shortly thereafter, with his wrist bleeding and in possession of the revolver. A lynch mob took him from jail and hanged him in the Crackerville Town Square, shooting and mutilating the body. The Happy Lynch Mob cheered its success in setting an example of punishing an obviously guilty Bad Black Man, and pictures of the celebration were widely circulated.

Around the time of World War II, JR lived in a big house on Main Street. When a man that JR did not think was his social equal bought a lot to build a house on Main Street in JR's neighborhood, JR tried to block construction of the house. However, the man put it to JR:

"Either let me build my house or I will put a Nigger Motel on the lot."

JR had adopted the Crackerville attitude toward black people, justified by the case of the Bad Black Man, so JR allowed the man to build his house on Main Street. The worst thing that could happen to his neighborhood would be blacks from out-of-town who had not learned to stay in their place in Crackerville.

A few years later, a lot on Main Street near JR's house was sold to the Roman Catholic Church, and The Church was built on Main Street.

Although JR was the richest man in Crackerville and could easily have outbid the Roman Catholics for the lot, he allowed The Church to be built on its Main Street lot.

A bit later, TV sets became so popular that every home in the USA had at least one. Those early black-and-white TV sets had heavy glass picture tubes.

A major ingredient of the heavy glass picture tubes was Barytes, in the form of a Barium Chemical. JR became a major producer of the Barium Chemical used in TV picture tubes, and his fortune and influence increased many-fold.

When color came to TV, the color picture tubes used Strontium instead of Barium. Since the Crackerville Baryrtes was a Barium ore, not Strontium, JR had to find deposits of Celestite Strontium ore. He found them in Mexico and in China, and became an advocate of international trade, setting up mines in Mexico to supply his Crackerville Chemical plant with Celestite to make Strontium Chemical for color TV picture tubes.

The Chinese flattered JR, saying that they were amazed to know that their Celestite ore could be made into something so useful as Celestite Chemical, and they would be honored if JR would allow them to visit his Crackerville Chemical Plant and pay homage to it. JR fell for the flattery, and a delegation of Chinese came to honor the plant (and photograph every part of it in detail).

A few years later, JR was surprised to find out that China had built its own Chemical Plants. Since the Chinese Chemical Plants had first call on the Chinese Celestite ore and were staffed by Free Slave Labor, the Crackerville Chemical Plant went broke and closed. JR himself had made so much money, and had so much real estate from his mining, that he remained prominent in Crackerville, but he never got over being defeated in business by China.

Maybe JR was distracted by his losing battle with China, but JR did not take any action when, near the end of the 20th century, the Roman Catholics built a new church away from Main Street, and put The Church up for sale. When a black congregation bid on The Church, JR did not bid against them, and a black congregation bought The Church on Main Street.

To the extent that he thought about it at all, JR saw the black congregation as a small group of Crackerville blacks, and the Crackerville blacks were uniformly subservient, having learned the lessons of the World War I lynching of the Bad Black Man and the later lynching of the black Hanged Man.

It was the 21st century when JR began to worry about his Main Street neighborhood.

The Church had a new Pastor, a black man from out-of-town, and the Yankee City Manager of Crackerville had not only hired The Chief, also a black man from out-of-town, but also had ordered The Chief to change the Crackerville Police Department from a good-old-boy department (subservient to JR and the elite Crackerville Consensus) to a department run according to modern standards of police procedure.

Even worse, under The Pastor from Atlanta, The Church began to grow and become a dynamic black presence in JR's Main Street Neighborhood.

BuyOut !!!

The Committee had to make two decisions:

1 - Was it really worth millions of dollars to rid the Main Street Neighborhood of the black presence (The Church and the Fat Man) ?

Clearly, in their White Racist eyes, the answer to that was YES !

2 - What would they do with the property ?

They could put McMansions on it and get back some,

but by no means all, of their Investment in Prejudice,

but

there were some on The Committee who saw an opportunity to recover all of the Investment, and maybe even make a profit. One such Committee Member was The Trader.

The Trader

Ever since he was in the first grade, The Trader had made profits trading. Over the years, he had accumulated almost as much money as JR. He hated to lose money on any deal, and was smart and patient in turning a profit on any property of any kind.

When The Trader looked at the Main Street Neighborhood of The Property (about 7 acres) that would come from The Church and the Fat Man, he saw a Mixed-Use Shopping/Office/ Residential Commercial Center.

Since JR, The Trader, and other members of The Committee were the controlling powers behind the Consensus government of the City of Crackerville, The Committee would have no problem getting any rezoning needed for such a Commercial Center.

A Commercial Center would commercialize the Main Street Neighborhood and (except from a Racist point of view) change it even more radically than would expansion of The Church, but that did not bother The Trader, whose primary interest was making a profit on every trade.

Some other members of The Committee were at first afraid of commercialization. Many of them had refused to admit that White Racism was the basis of their opposition to the blackness of The Church, telling themselves that they were only interested in protecting the Property Values of their homes, and they worried about what might be the effect of commercialization.

The Trader realized how dumb these people were. After all, while the size of the multiracial, mostly black, congregation of The Church had doubled from about 150 to about 300, the sale prices of homes in the White Racist side of the Main Street Neighborhood also had doubled, from around \$300,000 to around \$600,000. So it was obvious that expanding the blackness of The Church did not hurt Property Values of houses in the White Racist Neighborhood, and that when they spoke about protecting Property Values they were either speaking White Racist Code Words or just showing their ignorance and stupidity.

The Trader was as smart as they were dumb, so he had no problem convincing them that commercialization would actually help protect, and even increase, Property Values, by telling them:

Atlanta's upscale Buckhead had Mixed-Use Shopping/Office/Residential Commercial Centers, so it must be all right for Crackerville's Main Street Neighborhood to have one, and

the Crackerville Main Street Neighborhood would be even better than Atlanta's Buckhead, since the Crackerville Commercial Center would not only be like Buckhead's Commercial Centers, but it would also be a barrier against black presence,

like a Dam protecting their Pure White Valley against a Flood of Blackness.

FIN ???

I would like to write an ending to the LIFE section of this book by telling you how the BuyOut proposition turned out, and

what happened to The Property, the Main Street Neighborhood, The Church, The Pastor, The Chief, and the Fat Man,

but the ending lies in the Future, so this Story ends in suspense.

To quote from Watchmen, by Alan Moore and Dave Gibbons:

Adrian:

"... I did the right thing, didn't I? It all worked out in the end."

Doc Manhattan:

""In the end?" ... Nothing ends, Adrian, Nothing ever ends."

However:

The Future comes from the Present ...

... which is a product of the Past.

So:

the Present

According to a March 2009 OCC Quarterly Report "... NOTIONAL AMOUNT OF DERIVATIVE CONTRACTS ... MARCH 31, 2009, \$ MILLIONS

RANK	Holding Company	ASSETS	DERIVATIVES	
1	J P MORGAN CHASE	\$2,079,188	\$81,108,352	
2	BANK OF AMERICA	2,323,415	77,874,726	
3	GOLDMAN SACHS	925,987	47,749,124	
4	MORGAN STANLEY	626,023	39,125,255	
5	CITIGROUP	1,822,578	31,715,734	"

Note that if the derivatives go bad (as they are almost certain to do, given the ongoing economic collapse), there is no way that any of **the Big Five Banks** that control the USA government have enough assets to cover, as their

total assets are only about \$7.8 trillion against about \$277.6 trillion Derivative Exposure.

1 - The USA Treasury/Fed (owned by the Big 5) prints up and delivers to the Big 5 whatever money they need to keep their Ponzi Scheme running for them and their Casino Club members thus guaranteeing 25% returns to all the influential Casino Club players.

In 2008 that (called Quantitative Easing I) was around \$2 trillion.

In 2010 QEII was around \$4 trillion.

2 - The Casino's guaranteed 25% return is soaking up all investment capital into leaving none for productive investments that create real jobs for real people, so small banks that provide small loans in small towns (like Crackerville) are being closed by the USA government that gives trillions of QE money to the Big 5 and the influential Casino Club, but nothing to the small banks or people not influential enough to be allowed into the Casino Club.

3 - The prospect of a succession of rounds of QE dollar-printing, each double the size of the previous, destabilizes the Global Financial System, destroys the value of the dollar, and leads to a New Global Financial Order led by China along with Russia, Brazil, the European Union.

How did the Present get into such a state?

1945 - The USA won World War II, held over 20 million tons of Gold, and saw its dollar become the reserve currency of the world.

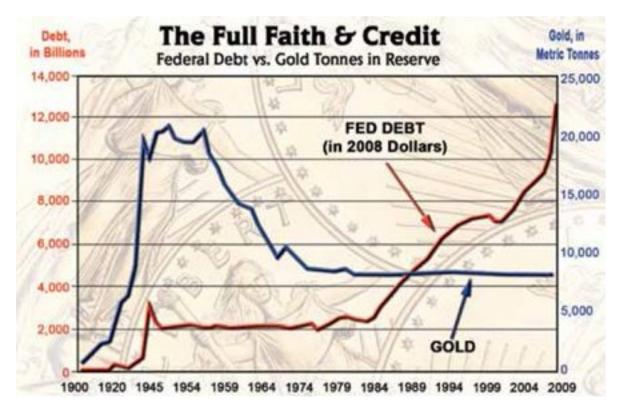
1954 - Kevin Lynch writes "... In a city of what size can we produce most efficiently, best facilitate cultural development, live the most satisfying lives? ... 350,000 ... may be near ... the optimum city size for modern society ...".

1960s - Corporate Social Contract required equity among: Stockholders; Management; Employees; Suppliers; and Customers.

1968 - Title IV of the HUD Act started a USA government New-Town program ... Bobby Kennedy was killed ...

1969 - Nixon became president.

1973 - Nixon took the USA off the Gold standard so that the rest of



(graph from Broke by Glenn Beck (Mercury Radio Arts 2010))

the world could no longer draw down USA Gold reserves.

From Nixon on, the USA could print dollars (as paper or electronic currency) at will, and the Financial Sector dominated the USA economy, revising the Corporate Social Contract to require only maximizing corporate profit.

The New-Town program was killed.

1994 - "... Long-Term Capital Management ... was founded ... LTCM's board of directors included Myron S. Scholes and Robert C. Merton, who shared the 1997 Nobel Memorial Prize in Economic Sciences for a "new method to determine the value of derivatives" ... [LTCM had]... annualized return of over 21% (after fees) in its first year, 43% in the second year and 41% in the third year ...". (Wikipedia)

1998 - 29 July - Vladimir Putin became Russian Federal Security Service (FSB) Chief. "... On 17 August 1998 ... Russia ... devalued the ruble, defaulted on domestic debt, and declared a moratorium on payment to foreign creditors ..." (Wikipedia) "... LTCM ... lost \$4.6 billion in less than four months following the 1997 Asian financial crisis and 1998 Russian financial crisis requiring ... a \$3.6 billion recapitalization (bailout) under the supervision of the Federal Reserve ...". (Wikipedia)

1999 - USA/NATO attack on Kosovo/Balkans is MILITARY VICTORY giving USA/NATO great influence from Kosovo and Serbia through Bulgaria, Romania, Moldavia, and Ukraine



to Azerbaijan and Caspian Sea (thought to contain 200 billion barrels of oil), Georgia, Kirghizia, Uzbekistan and Central Asia to the back door of China.

2000 - "... world oil prices rapidly rose ... Russia ran a large trade surplus in 1999 and 2000 ... Russia's economy ...[being not]... dependent on a banking system ... bounced back ... LTCM ... liquidat[ed] and dissolv[ed] in early 2000 ...". (Wikipedia)

2003 - Caspian Sea exploration shows only 20 billion barrels of oil, not the expected 200 bbl, so the big oil prize up for grabs is Iraq's 100 bbl.

USA invades Iraq so that Iraqi oil will be traded in Dollars, not Euros. In the Davos World Economic Forum USA speakers said "... We need to attack Iraq ... preemptively, as part of a global war. Iraq is just one piece of a campaign that will last years, taking out states, cleansing the planet. ...".

2004 - CIA Orange Revolution in Ukraine installs CIA puppets Yushenko and Tymoshenko, but they lost 2010 election to pro-Russian Yanukovich.

2008 - USA Big 5 Bank financial crisis: the Credit Default Swap problem had grown to \$55 trillion in October 2008 and the total value of Derivatives had grown to \$531 trillion. Overvalued mortgages triggered a collapse of the Credit Default Swap asset-money Bubble. To cover those losses and to protect the total Derivatives market from collapse the Fed and Treasury began Quantitative Easing = printing trillions of Dollars a year and giving it to the Big 5 Banks and their friends by buying their losing Derivative bets. This has enabled the Finance Capitalism Derivatives market to continue and even grow but has done nothing to help any productive sector of the USA. David Stockman said:

"... by 2008 China, Australia, and Brazil

had become the world's new mining and manufacturing economy ..."

The unstable growth Derivatives from \$106 trillion in 2002 to \$531 trillion in 2008 causes China to propose (according to a Reuters 17 September 2008 article) that

"... the world must consider building a financial order no longer dependent on [USA] ...".

2009 - Swaminathan S. Anklesaria Alyarin 22 April 2009 economictimes.indiatimes.com said: "... the financial sector is comprehensively bust. It needs to recognise the losses, writing off trillions. ... **The market solution would be to force insolvent banks into bankruptcy**, with shareholders and creditors taking a huge hit ... Many titans of Wall Street will disappear ... the **Obama administration refuses to contemplate this obvious solution**. ... In a market economy, well-managed companies should be rewarded with profits,

while mismanaged companies should go bust. This basic rule has been suspended almost entirely for the titans of Wall Street. ... Accounting norms have been tweaked to permit zombie banks to pretend they are alive and solvent. ... Wall Street has captured the White House,

so nothing will be done to imperil the politico-financial network that rules the US. ...".

Thus, the USA/Fed/Treasury

followed the 1998 precedent of bailing out LTCM with Billions by bailing out the Big 5 Banks and their Derivatives Casino with Trillions

allowing the Big 5 Bankers and their Casino Cronies to collect 25% returns

guaranteed by USA/Fed/Treasury money-printing

The guaranteed 25% returns of the Casino meant that the Casino would suck up all available capital so that no capital was available for investment in any Productive Industrial Enterprise involving any risk whatsoever.

In the USA, Finance Capitalism had exterminated Industrial Capitalism but China had a balanced Finance/Industrial Capitalism.

What key policy decisions could be taken to get the USA out of its dysfunctional Present addiction to Finance Capitalism ?

1 - Return to the full Corporate Social Contract requiring equity among ALL stakeholders: Stockholders; Management; Employees; Suppliers; and Customers.

2 - Use the trillions of dollars printed by the USA, not to build up Big 5 Bank capital (if their Casino Ponzi Schemes collapse, let them go broke), but to build a USA New Prosperity by building New Towns (350,000 each) connected by high-speed rail using the trillions of dollars, with a mandate that ALL materials used MUST be produced in the USA (it might take 5 to 10 years to build the necessary factories and nuclear power plants to produce the materials, but they too can be financed by the trillions of newly-printed dollars).

Since the source of funds for USA New Prosperity is money printed by the USA Treasury/Fed and distributed by USA federal contracts (NOT necessarily through the Big 5 Banks) there is no need to raise that money by taxes,

3 - As to such things as health care and education,

a simple elimination of the age limit would cover everybody by Medicare, and it could be funded by eliminating the cap on FICA tax and applying FICA to all types of income.

That would probably produce enough revenue to provide free education through university and graduate school to all serious students, so that they don't have huge debt burdens when they leave school.

Other useful actions (such as decriminalization of drugs and as elimination of restrictions on the free flow of ideas) might be taken, but it may be good to start with the above 3.

What happens if the USA does not take such policy decisions ?

The USA will become a subordinate part of a New Global Order led by China.

SCIENCE of the UNIVERSE - PROLOGUE

A little less than 15 billion years ago, our Universe emerged from the Void.

4 billion years ago, our Earth and Moon were orbiting our Sun.

2 billion years ago, bacteria built a nuclear fission reactor in Africa.

1939 - Lise Meitner (a Jewish physicist who had left Berlin for Sweden to escape Hitler's persecution) was the first Human to discover how the Uranium Fission Chain Reaction Process worked.

1945 - the USA dropped Nuclear Fission Bombs named "Little Boy" (a Uranium bomb) and "Fat Man" (a Plutonium bomb) that ended the Japanese part of World War II.

1952 - A Little Boy watched trucks of limonite iron ore waiting on a railroad loading ramp for a train. The Crackerville stationmaster told the trucks to go away, as no train was scheduled to arrive any time soon. To his surprise, the tracks were cleared. A Military Train pulled up to the loading ramp. The limonite was loaded. As it left, the stationmaster and all those present were told that the train was never there, and anyone speaking about would be violating national security. The Train That Never Was went on the the Pacific Coast from which the limonite was shipped to Enewetak where the USA detonated the first Fusion H-bomb. The experiments at Enewetak included testing materials for shielding. One material combined both heavy nuclei (Fe) and neutron-absorbing hydrogen (H) - the Crackerville limonite (Fe2O3+H2O) that had been shipped to Enewetak from the Pacific Coast terminus of the Train That Never Was.

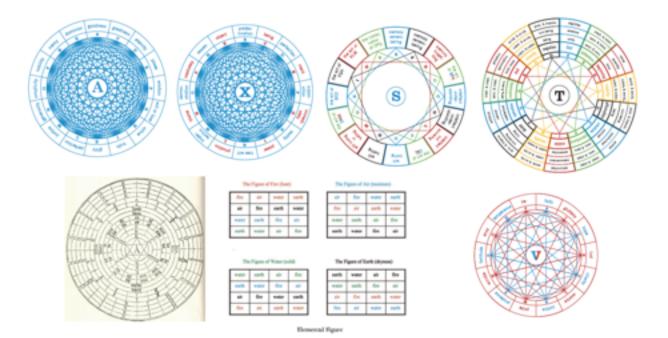
Little Boy was fascinated by Nuclear Physics and how Science interacts with Human History . Even after he grew up to be Fat Man, the lawyer, he spent his spare time studying Physics and History.

SCIENCE of the UNIVERSE -

Unified Theory of Everything

Science was based on understanding Nature. Nature was not always aligned with the Consensus of Human Institutions. Throughout History, conflicts arose. Often the Human Institutions would succeed in the Short Term in enforcing their Consensus, but Nature is patient and plays a Long Term game.

In the 14th century Dominican Inquisitors had Ramon Llull condemned as a heretic for advocating the unity of human religions, using 16x16 Oracle patterns that came from Cushite Africa.



In the 17th century the Roman Inquisition burned Giordano Bruno at the stake and sentenced Galileo to house arrest for the rest of his life, all for the sake of the Inquisitorial Community's enforcement of conformity to its Consensus.

Rediscovery of the full significance of Ramon Llull's Oracle-patterns did not happen until

after 20th century science experiments progressed beyond Gravity, Electromagnetism, and early Quantum Mechanics, and

after Lise Meitner discovered the Uranium Fission Chain Reaction Process that led to the Fission Bombs that ended the Japanese part of World War II.

Over the next couple of decades, further experiments in nuclear and particle physics showed that everything other than Gravity could be described by 3 forces of a Standard Model:

Electromagnetism, with the symmetry of a circle, denoted by S1 = U(1)

Weak Force with Higgs, with the symmetry of a 3-dimensional sphere, denoted by S3 = SU(2)

Color Force, with symmetry related to a Star of David, denoted by SU(3)

In contrast to the advances in experimental results and construction of the Standard Model of physics, the social structure of the Physics Scientific Community evolved during the 20th century into a rigid Physics Consensus Community much like the Inquisitorial Consensus Community of a few hundred years ago.

For example, in the USA physics community around the middle of the 20th century, J. Robert Oppenheimer enforced his dislike of the ideas of David Bohm by declaring, as head of the Princeton Institute for Advanced Study:

"... if we cannot disprove Bohm, then we must agree to ignore him ..."

As the 20th century ended and the 21st century began, the Physics Consensus Community continued to enforce conformity to Consensus so strongly that Stanford physicist Burton Richter said:

"... scientists are imprisoned by golden bars of consensus ..."

The rigidly enforced Physics Consensus Community was so void of independent thought that the 20th century ended without anyone seeing how Ramon Llull's Oracle-patterns explained both Gravity and the Standard Model in a unified way,

but in January 2008 the cover of the magazine of Science & Vie declared:

"Theorie du tout *Enfin*!

Un physicien ... chercheur hors norme ... aurait trouve la piece manquante"

The missing piece was a 248-dimensional structure known as E8.

The beyond-the-norm physics researcher was a California-Hawaii Surfer Dude who realized that the structure of E8 could unify Gravity and the Standard Model in a way that satisfied Einstein's Criterion for

a structure "... based ... upon a faith in the simplicity ... of nature: there are no arbitrary constants ... only rationally completely determined constants ... whose ... value could ... not ... be changed without destr

oying the theory ...".

The Little Boy who in 1952 watched the Train That Never Was had grown up to be a Fat Man who spent his spare time studying science and the Oracle-patterns of Ramon Llull.

When Fat Man saw Surfer Dude's E8 ideas, he realized that the 248 dimensions of E8 only needed 8 more to give the $256 = 16 \times 16$ of Ramon Llull's Oracle-patterns,

so that the African Cushite 16x16 Oracle-patterns, as interpreted by Ramon Llull, not only showed the unity of all human religions, but also showed the unity of Gravity and the Standard Model.

To Surfer Dude and the Fat Man, the 240 root vectors of E8 formed a representation of El Aleph of Jorge Luis Borges.

Further, using the 16x16 Oracle-pattern structure along with some non-Consensus ideas of people like Irving Segal, Meinhard Mayer, Armand Wyler, and David Bohm, Fat Man was even able to do the calculations that Richard Feynman had declared to be necessary when he said:

"... The whole purpose of physics is to find a number, with decimal points, etc! Otherwise you haven't done anything. ..."

(The Appendix to this Story lists numbers calculated by Fat Man.)

Neither Surfer Dude ("physicien ... chercheur hors norme" = "physics researcher beyond the norm") nor Fat Man (lawyer working on physics in his spare time) had made their discoveries while working within the Physics Consensus Community,

which was mostly hostile to Surfer Dude's discovery that E8 was "la Piece Manquante" = "the Missing Piece" of the Puzzle of Unification of Gravity and the Standard Model

and

to Fat Man's realization that the Missing Piece E8 showed how Ramon Llull's African Cushite 16x16 Oracle-patterns explained the fundamental Unity of Gravity and the Standard Model.

How hostile was the Physics Consensus Community? VERY!

Years ago, while Fat Man was developing his physics model, the Cornell physics e-print arXiv blacklisted him so that he could not post his work and preserve it for posterity. Although Cornell made pretensions of being pro-civil-rights, under its skin Cornell was just another Crackerville.

Cornell arXiv blacklisting hurt Fat Man's feelings deeply, but even it was not as bad as what happened after Fat Man had compared his calculations with published results of experiments at Fermi National Laboratory (Fermilab) near Chicago, and seen that 6 events published in 1997 were consistent with his calculations.

By 2008, Fermilab had recorded so many more new events that, if the new events were made public, they would most likely either conclusively confirm Fat Man's calculations or refute them.

So, Fat Man asked a Fermilab physicist for access to data about the new events. Despite the fact that Fermilab was not a private corporation, but was a National Laboratory funded by United States taxpayers (one of which was Fat Man),

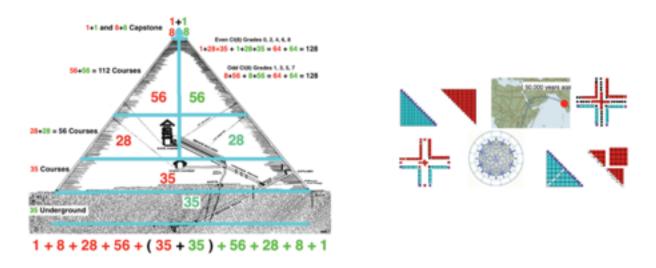
Fermilab's response was that Fermilab would keep the data about the new events secret from the public so long as Fermilab existed.

The Physics Consensus Community was so afraid of the Truth that it buried the new events deeper than the Vatican had buried records of Inquisitions

HISTORY of EVERYTHING - PROLOGUE

100,000 years ago, Humans were expanding from the African home-land of Cush to Eurasia and beyond.

12,000 years ago, Cushites knew that the knowledge-patterns of 8 binary choices giving $2^8 = 256 = 16x16$ possibilities could act as an Oracle.



From the African land of Cush, the 16x16 Oracle-patterns spread, so that by the 13th century parts of them were found in:

Judaism as the 248 positive Commandments plus the 365 negative Commandments given to Moses during the 50 days from Egypt to Sinai;

India as the 240 parts of the first sukt of the Rig Veda;

Japan as the 128 possibilities of Shinto Futomani Divination;

China as the 64 possibilities of the I Ching;

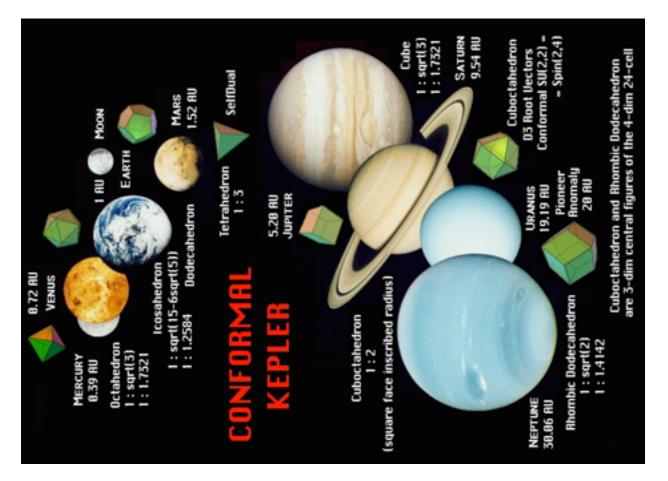
Mediterranean Africa as the 16 possibilities of the Ilm al Raml.

Near the end of the 13th century,

Ramon Llull of Mallorca studied the 16 possibilities of the Ilm al Raml and realized that the 16x16 Oracle-patterns of Cushite Africa showed the underlying unity of all human religions.

However, the establishments of the various religions refused to accept Ramon Llull's revelations, and his ideas were relegated to a few obscure publications, plus an effort to preserve some aspects of the 16x16 Oracle-patterns in the form of the 78 Tarot cards and the subset of 52 cards that remains popular into the 21st century.

In the 16th century Johannes Kepler found a correspondence between polytopes and planets



which could be extended to include Uranus and Neptune.

HISTORY of EVERYTHING - 1 - Slaves and Indentured Servants

Unification of Gravity and the Standard Model was important to Fat Man, who as a Little Boy had watched the Train That Never Was, but the unity of all human religions through the African Cushite 16x16 Oracle-patterns meant even more to him.

In late 18th century Virginia, an Indentured Servant woman of Clan McIntosh of Scotland fell in love with a co-worker Slave man from Africa. Since Indentured Servants from Scotland and Slaves from Africa worked alongside each other, there was a lot of Romantic and Cultural Interaction among them. The Cultural Interaction is still evident nowadays. For example, according to a 16 February 2005 Newhouse News Service article by Chuch McCutcheon:

"... Jazz artist Willie Ruff ... a Yale University music professor ... is convinced that "presenting the line" - the unaccompanied singing of psalms in Gaelic by Presbyterians of the Scottish Hebrides - is the direct ancestor of "lining out," a hymnal singing style of 19th century slaves still practiced at ... black Southern churches ...".

The Romantic Interaction is obviously still evident in people with mixed genetic structure, such as the descendants of the Clan McIntosh Indentured Servant and the African Slave of late 18th century Virginia. One of their Grand-Daughters was light-colored and beautiful, so at age 16 she left Virginia to start a new life in central North Carolina, where she passed for white and married into the white community. She and her family continued to move South and West, into what was in the early 19th century the most racially unbiased part of North America: the Okefenokee Swamp and land to the West of it, then known as the Tallassee (meaning "abandoned fields") Territory and now known as South Georgia and North Florida. Only after 1818 when Georgia reluctantly accepted the Northern part of the Tallassee Territory (it had been called "a sterile and unprofitable land") and after 1822 when Florida became a territory of the United States, did racially biased laws begin to be enforced there, but by then the McIntosh Slave Grand-Daughter's family had passed into the white community, into which (about 100 years later) Fat Man's mother was born.

HISTORY of EVERYTHING - 2 - From Georgia to Laredo

The black Hanged Man's widow was not alone in leaving Georgia for Texas.

At the end of the USA Civil War, the Fat Man's Great-Grand-Uncle left Georgia for Laredo to work for the Texas-Mexican Railroad and the Mexican National Railroad, so

the Fat Man not only has African cousins connecting him with the heritage of the Cushite 16x16 Oracle-patterns,

but also Mexican cousins connecting him with the Spanish heritage of Ramon Llull.

Therefore, Fat Man was doubly offended when a City of Crackerville employee tried to intimidate him from extending his driveway and letting The Church use it for parking, using a City of Crackerville Ordinance that

"we use to keep them Hispanics in line".

HISTORY of EVERYTHING - 3 - China

If the Fat Man had Chinese cousins, he did not know it, but in the course of pursuing his study of physics, Fat Man met a physics graduate students from China and was much impressed by their abilities and willingness to do hard work. It seemed that they were following the pattern set by Deng Xiaoping, whose fundamental practical policy was:

"It does not matter whether a Cat is Black or White, it only matters that it Catches Mice."

The death of China's leaders with a Mandate of Heaven seems to be correlated with major comets.

In 1976, the year of perihelion of Comet West, Mao Zedong and Zhou Enlai died.



In 1997, the year of perihelion of Comet Hale-Bopp, Deng Xiaoping died.



China has become the dominant manufacturing power on Earth.

Ever since the Industrial Revolution began in 18th century Britain, the dominant manufacturing power has also been politically dominant.

First was the British Empire over which the Sun Never Set.

After World War II the American Empire ruled the Earth.

However, when greedy USA capitalist managers, during the Reagan, Bush I, Clinton, and Bush II administrations, decided to export manufacturing to China to take advantage of China's Cheap Labor, using Cheap Global Transportation, the USA effectively abdicated World Leadership to China.

The USA was acting like an ante-bellum Crackerville Plantation Master, with

the Chinese Government as the Overseer of the Slaves doing the Labor.

The Truth was that the USA Plantation Master did not really control the Chinese Overseer.

It was the Chinese who had the real Power of Industry, and who were assuming the role of Ruler of the Earth.

HISTORY of EVERYTHING - 4 - Future History

Past History shows we got to where we are. What about Future History?

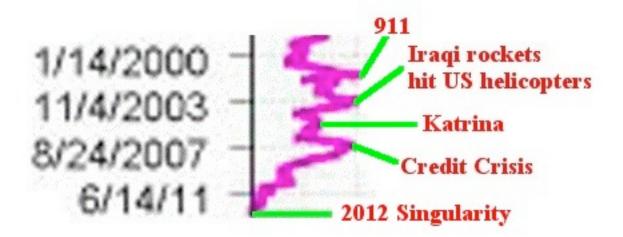
One person (definitely not a Conformist to Consensus) who tried to see History and its extension into the future was Terence McKenna. Matthew Watkins said "... Terence McKenna ... developed ... the Timewave theory ... which involved ... I Ching hexagrams [a part of the 16x16 Oracle-patterns]...".

In a 1993 Omni interview Terence McKenna said "... The world is not a single, one-dimensional, forward-moving, causal ... thing, but some kind of interdimensional nexus. ... Something in an unseen dimension is acting as an attractor for our forward movement in understanding ... It's what we have naively built our religions around ... We are at the breakpoint ... What lies ahead is ...

[either] freedom and transcendence ...

[or] scarcity, preservation of privilege, forced control of populations ...".

Terence McKenna died on 3 April 2000, but his Timewave description of History not only described Past History but also continued on to make Predictions up to the date of the Singularity of December 2012



showing:

a peak when the Twin Towers of New York were destroyed on 911 of 2001 - the City of New York Comptroller estimated the replacement cost of \$21.8 Billion - the USA failed to rebuild them;

a second peak on November 2003 when the US military began to encounter real resistance (rockets shooting down helicopters) in Iraq - although the cost of a decade in Iraq might be \$2 Trillion, the prize of Iraq's 100 billion barrels of oil at \$100 per barrel would be \$10 Trillion - even so, the USA failed to either get out of Iraq or put in enough resources to conclusively defeat the resistance;

a third peak in 2005 when Katrina devastated New Orleans - estimates of Katrina damage ranged up to \$200 Billion - like the Twin Towers of New York, the USA failed to rebuild all the destroyed neighborhoods;

a fourth peak when, in the words of Nelson D. Schwartz and Julie Creswell writing in a New York Times web article dated 23 March 2008: "... in ... August [2007], we were in a full-fledged credit crisis with C.E.O.'s of top banks running around like headless chickens ..." - the magnitude of the crisis can be gauged by the \$45 Trillion amount of the Hedge Fund/Credit Default Swap smoke-and-mirrors shadow banking system assets, based on only \$7 Trillion total assets of the Mortgage Market, about half of the \$14 Trillion M3 Money Supply (which M3 is now in 2008 being increased at an 18 percent per annum rate) - If the Mortgage Market were to get government guarantees against default, the entire \$45 Trillion of Hedge Fund/Credit Default Swap assets would be worthless, and that \$45 Trillion (much larger than the \$10 Trillion prize of Iraqi Oil at \$100 per barrel) would disappear from the world economy.

After the August 2007 peak, the Timewave shows a steady decline to a Singularity in December 2012. The Singularity looks like Terence McKennas "breakpoint" leading to

[either] "freedom and transcendence"

[or] "scarcity, preservation of privilege, forced control of populations".

It seems to me that the Way to Freedom and Transcendence is for the USA to break free of its present Status Quo Consensus and let the \$45 Trillion of smoke-and-mirrors shadow-banking-system Hedge Fund/Credit Default Swap assets to go away, and use about \$3 Trillion of real-banking-system Money Supply for a Nuclear Energy / Hydrogen Fuel / Desalted Sea-Water program using components manufactured in new USA factories.

If the USA tries to maintain its present Consensus Status Quo by bailing out the Hedge Fund people, remaining Oil-Based throughout the remaining decade or so of Post-Peak Cheap Oil, and continuing to rely on Chinese Zero-Wage-Slave-Labor Manufacturing, it seems to me that it will go the way of "scarcity, preservation of privilege, forced control of populations".

Of all the innumerable futures toward which time forks perpetually, according to Borges's Garden of Forking Paths, which Future Path will the USA choose ?

My hope is that the choice of the USA will take into account the words of Rudyard Kipling, who said:

The Gods of the Copybook Headings:

As I pass through my incarnations in every age and race, I make my proper protestations to the Gods of the Market-Place. Peering through reverent fingers I watch them flourish and fall.

And the Gods of the Copybook Headings, I notice, outlast them all. We were living in trees when they met us. They showed us each in turn. That water would certainly wet us, as Fire would certainly burn ... They denied that Wishes were Horses; they denied that a Pig had Wings.

So we worshiped the Gods of the Market Who promised these beautiful things ... But, though we had plenty of money, there was nothing our money could buy, And the Gods of the Copybook Headings said: 'If you don't work you die.'

Then the Gods of the Market tumbled, and their smooth-tounged wizards withdrew, And the hearts of the meanest were humbled and began to believe it was true That All is not Gold that Glitters, and Two and Two make Four ... And the Gods of the Copybook Headings limped up to explain it once more ... As surely as Water will wet us, as surely as Fire will burn, The Gods of the Copybook Headings with terror and slaughter return!

APPENDIX -

- Unified Theory of Everything Calculation Results

Here are some unified physics numbers calculated by Fat Man using the 16x16 Oracle-pattern structure along with some non-Consensus ideas of people like Irving Segal, Meinhard Mayer, Armand Wyler, and David Bohm:

Force Strengths:

Gravity = 5 x 10^-39 Electromagnetic = 1 / 137.03608 Weak = 1.05 x 10^-5

Color at 245 MeV = 0.6286 Renormalization gives Color at 91 GeV = 0.106 and including other effects gives Color at 91 Gev = 0.125

Weak Boson Masses (based on a ground state Higgs mass of 1465 GeV):

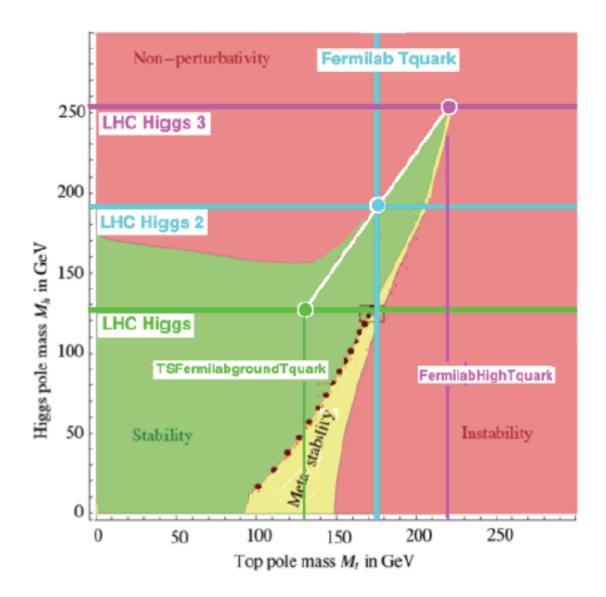
 $M_W^+ = M_W^- = 80.326 \text{ GeV};$

M_Z0 = 80.326 + 11.536 = 91.862 GeV;

Tree-level fermion masses (Quark masses are constituent masses due to a Bohmian version of Many-Worlds Quantum Theory applied to a confined fermion, in which the fermion is at rest because its kinetic energy is transformed into Bohmian PSI-field potential energy.):

Neutrinos: Me-neutrino = Mmu-neutrino = Mtau-neutrino = 0 at tree-level (first order corrected masses are given below) Electron/Positron Me = 0.5110 MeV Up and Down Quarks Md = Mu = 312.8 MeV Muon Mmu = 104.8 MeV Strange Quark Ms = 625 MeV Charm Quark Ms = 625 MeV Charm Quark Mc = 2.09 GeV Tauon Mtau = 1.88 GeV Beauty Quark Mb = 5.63 GeV Truth Quark Mt = 130 GeV

8-dimensional Kaluza-Klein spacetime with Truth-Quark condensate Higgs gives a 3-state system with a renormalization line connecting the 3 states:



Low ground state: Higgs = 146 GeV and T-quark = 130 GeV

Medium Triviality Bound state: Higgs = 176-188 GeV and T-quark = 172-175 GeV

High Critical Point state: Higgs = 239 +/- 3 GeV and T-quark = 218 +/- 3 GeV

Kobayashi-Maskawa parameter calculations use phase angle d13 = 1 radian (unit length on a phase circumference) to get the K-M matrix:

d s b u 0.975 0.222 0.00249-0.00388i c -0.222-0.000161i 0.974-0.0000365i 0.0423 t 0.00698-0.00378i -0.0418-0.00086i 0.999

Corrections to the tree-level neutrino calculations give neutrino masses

nu 1 = 0

 $nu_2 = 9 \ge 10^{-3}eV$

 $nu_3 = 5.4 \times 10^{(-2)} eV$

and the neutrino mixing matrix:

	nu_1	nu_2	nu_3
nu_e	0.87	0.50	0
nu_m	-0.35	0.61	0.71
nu_t	0.35	-0.61	0.71

The mass of the charged pion is calculated to be 139 MeV

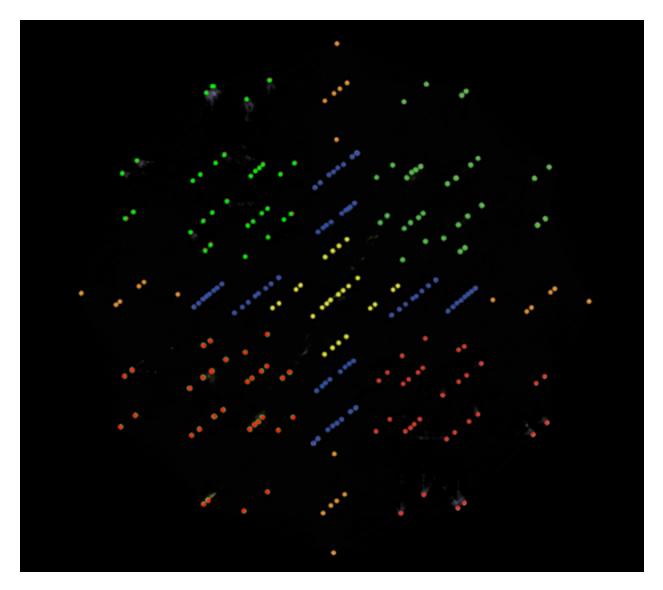
CRACKERVILLE Life, Science of the Universe, and History of Everything by J. B. Good The Neutron-Proton mass difference is calculated to be 1.1 Mev,

The ratio Dark Energy : Dark Matter : Ordinary Matter

for our Universe at the present time is calculated to be:

0.75:0.21:0.04

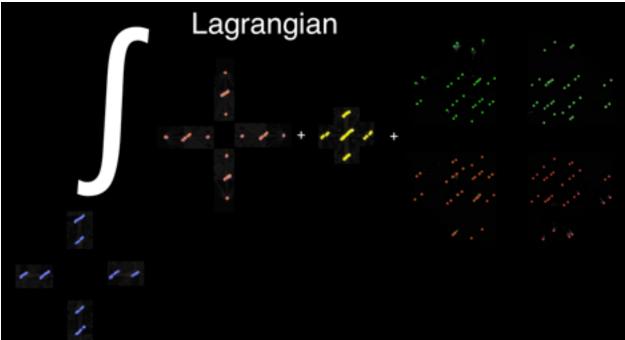
The 16x16 Oracle-pattern structure is indicated in this picture of 240 root vectors of E8



which are the same 240 E8 Root Vectors as shown on the cover from a different perspective (perspective of cover is 8 circles of 30 vertices, this perspective of almost square projection).

32 green dots + 32 cyan dots represent 8 components of 8 fundamental Fermion Particles.
32 red dots + 32 magenta dots represent 8 components of 8 fundamental Fermion AntiParticles.
64 blue dots represent 8 position x 8 momentum of 8-dim Kaluza-Klein SpaceTime.
28 yellow dots represent 16 Conformal Gravity Gauge Bosons + 12 Standard Model Ghosts.
28 orange dots represent 12 Standard Model Gauge Bosons + 16 Conformal Gravity Ghosts.

Collectively interacting according to E8 substructure, they form a realistic Lagrangian



Further calculations based on the 16x16 Oracle-pattern indicate explanations of

the Pioneer Anomaly (increase in spacecraft acceleration beyond the orbit of Uranus) and

a Quantum Theory of Consciousness (based on the model of Hameroff and Penrose).

Combining many copies of the 16x16 Oracle-pattern Clifford Algebra structure produces a generalized Hyperfinite II1 von Neumann Algebra factor for Algebraic Quantum Field Theory.

Details can be found in the web sites at <u>http://www.tony5m17h.net/</u> and http://www.valdostamuseum.org/hamsmith/

For readers who understand the language of Lie Algebras, Lie Groups, and Symmetric Spaces, here is an outline of the E8 structure of the Unified Physics Model (i.e., why the dots on the cover of this book are the colors they are):

E8 has graded structure 8 + (28 = D4) + 56 + (64 = U(8)) + 56 + (28 = D4) + 8

Even part of E8 graded structure = D8 == (28 = D4) + (64 = U(8)) + (28 = D4)

E8 / D8 = 64 + 64 == 8x8 + 8x8 = Fermion Particles and AntiParticles

 $D8 / D4 \times D4 = 64 = U(8) = 8 \times 8 = Kaluza-Klein Spacetime$

D4 / Spin(6)xSpin(2) = D4 / U(4) is a Kahler manifold with Complex Structure that allows Wick Rotation Changes of Signature so that:

D4 can be Spin(0,8) or Spin(1,7) or Quaternionic Spin(2,6) Spin(6) can change to Spin(2,4) U(4) can change to U(2,2)

There are two D4 in E8, so:

one D4 gives Conformal Gravity by D4 / U(2,2) = D4 / Spin(2,4)xSpin(2)

the other D4 gives the Standard Model by D4 / U(4) = D4 / Spin(6)xSpin(2)

The structure of E8 Lagrangian and SpaceTime and Gauge Bosons for the Standard Model and Gravity / Dark Energy

