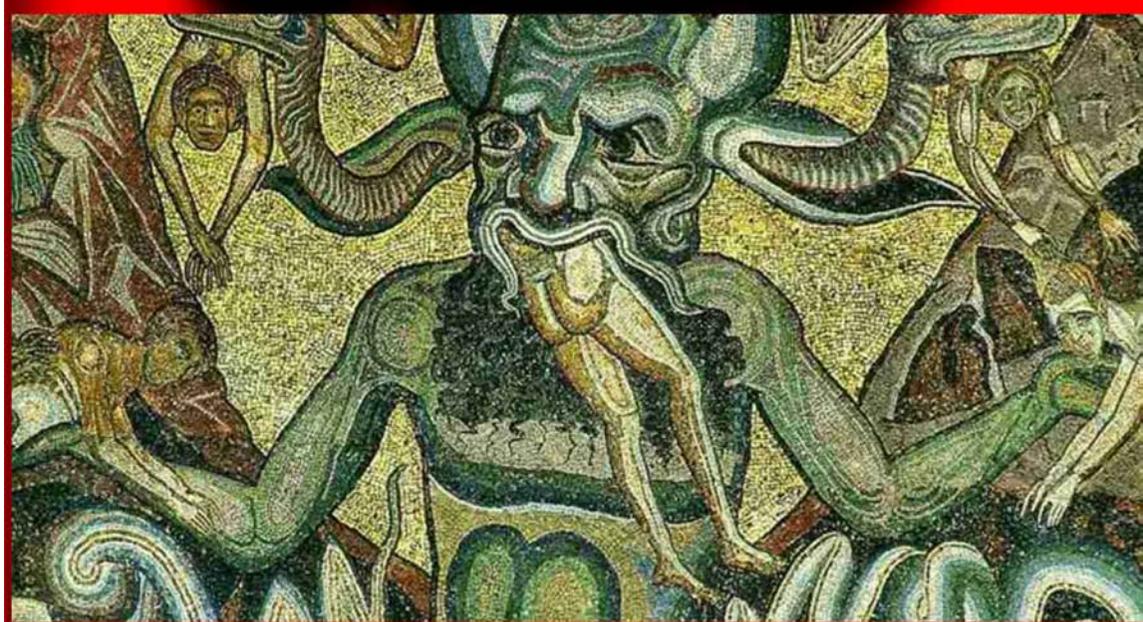


ENERGY ENHANCEMENT
THE SATANIC SUPPRESSION
OF SCIENCE



AGAINST SATANISM
VOLUME 9

DEDICATION

With all Thanks, Love and Gratitude to Swami Devi Dhyani and all the helpers who make these books and DVDs possible.

With all Thanks, Love and Gratitude to my Mother and Father and to all my other Teachers, Theos Bernard, Sri Yogendra, Eric Berne, Gurdjieff, Father Bede Griffiths, Osho, Zen Master Hogen, Swami Sivananda, Swami Satchitananda, and all the other giants upon whose shoulders I stand - who made me able to be what... I AM – Swami Satchidanand

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Swami Satchidanand**

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**AGAINST SATANISM
VOLUME 9**

**The Satanic
Suppression of
Science**

**To Create the Oligarchic
Satanic, "Principle of
Poverty"**

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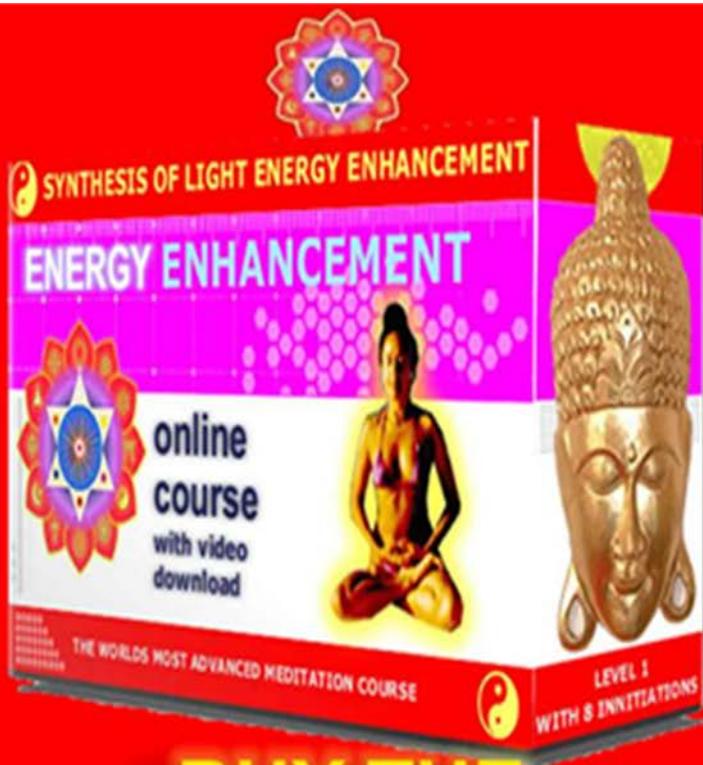
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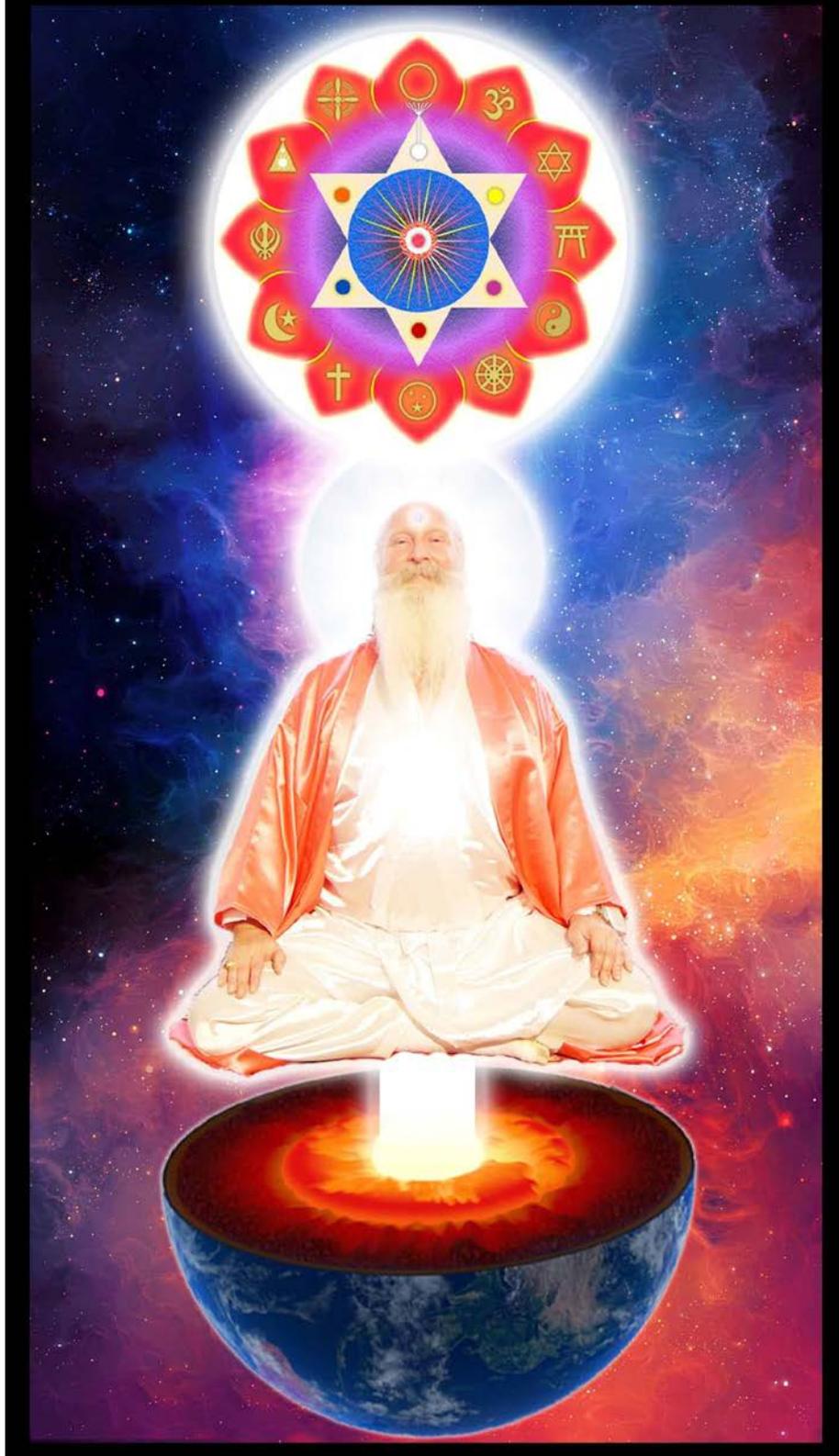
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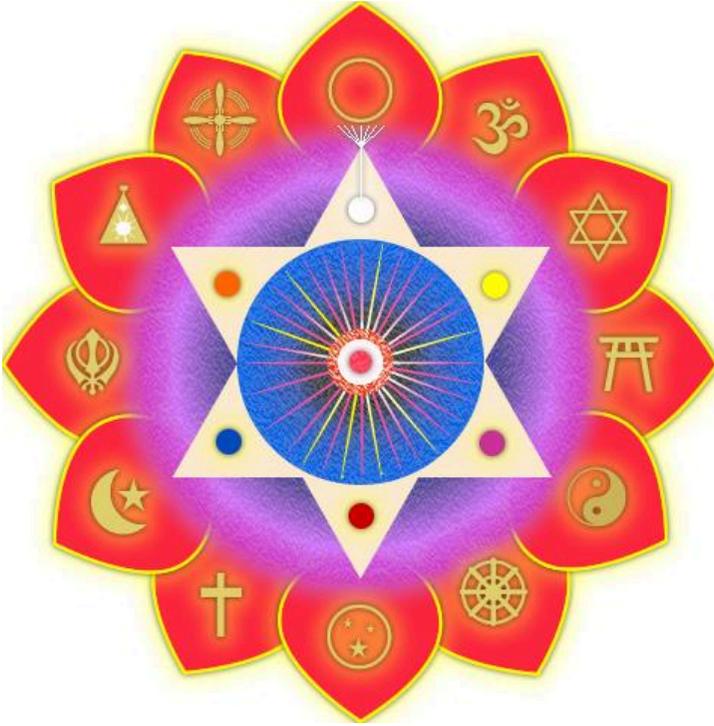
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**PLATO AND
SATANIC
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SECRET AGENT
ARISTOTLE
"THE
POISONER" OF
ALEXANDER
THE GREAT - BY
RAPHAEL**

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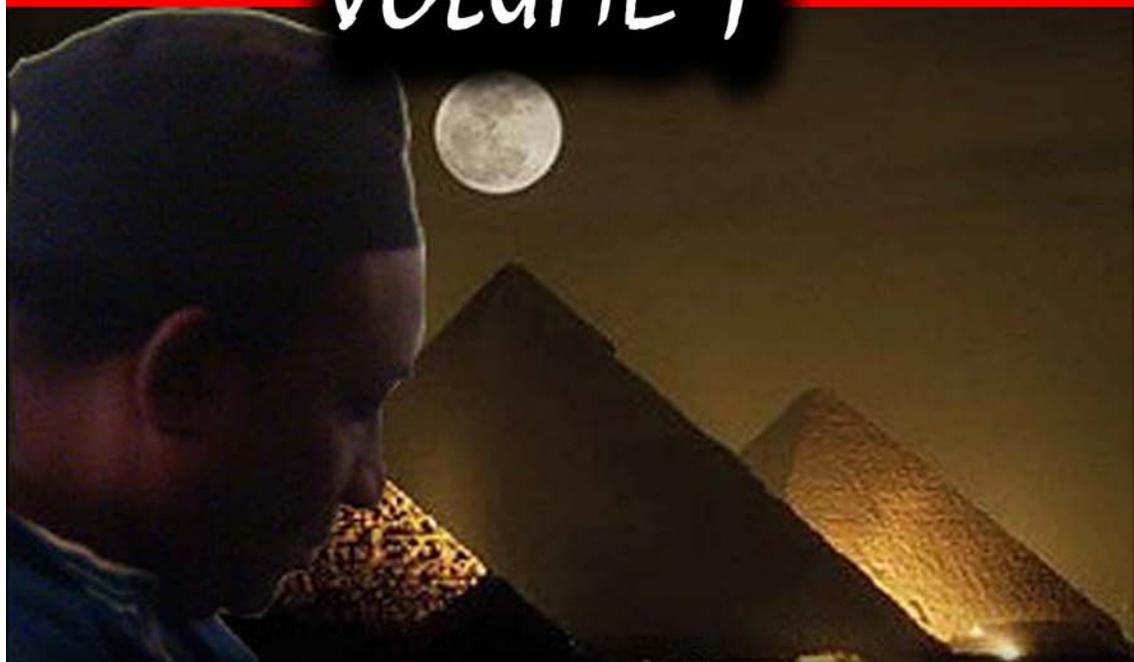
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**AGAINST SATANISM
MIND CONTROL
BLACK ASSASSINS
VOLUME 1**



BY PRINCE RAY BULLOCK

EDITED BY

SATCHIDANAND

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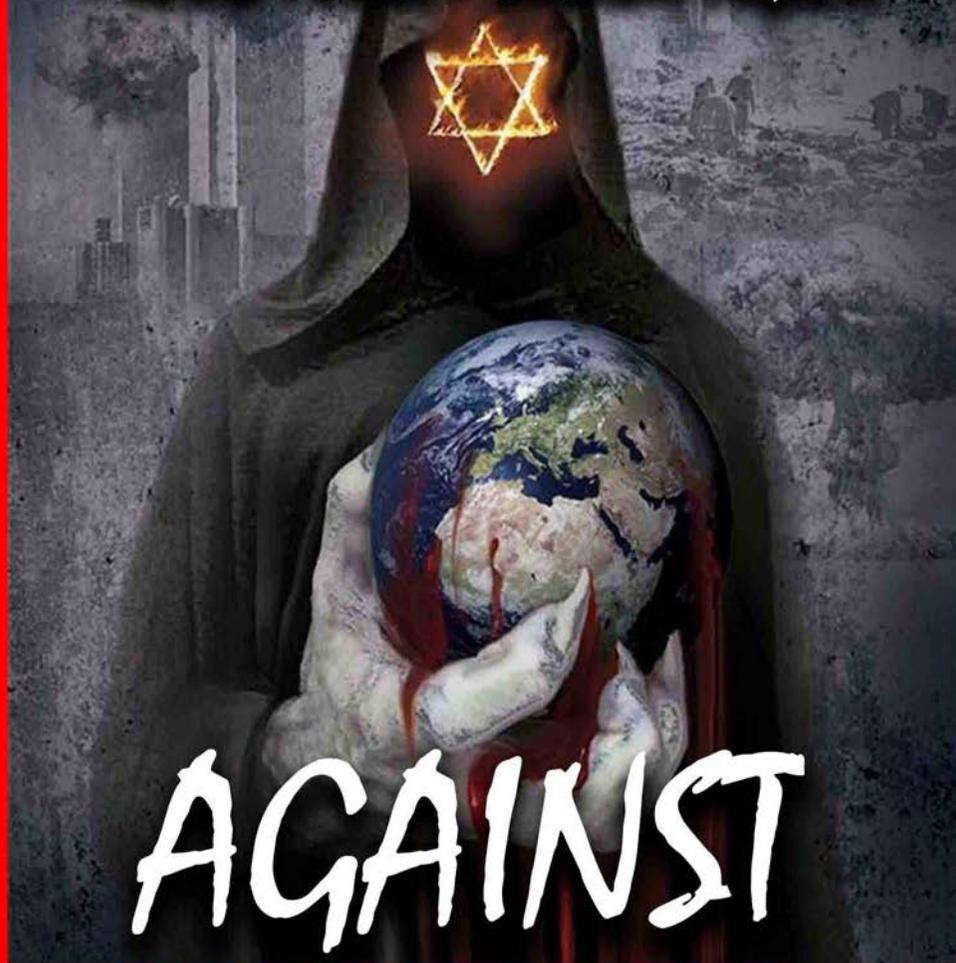
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SATANIC HISTORY

FAKE COMMUNISM

- KARL MARX - BRITISH AGENT



AGAINST

SATANISM

10,000 YEARS OF TOTAL CONTROL

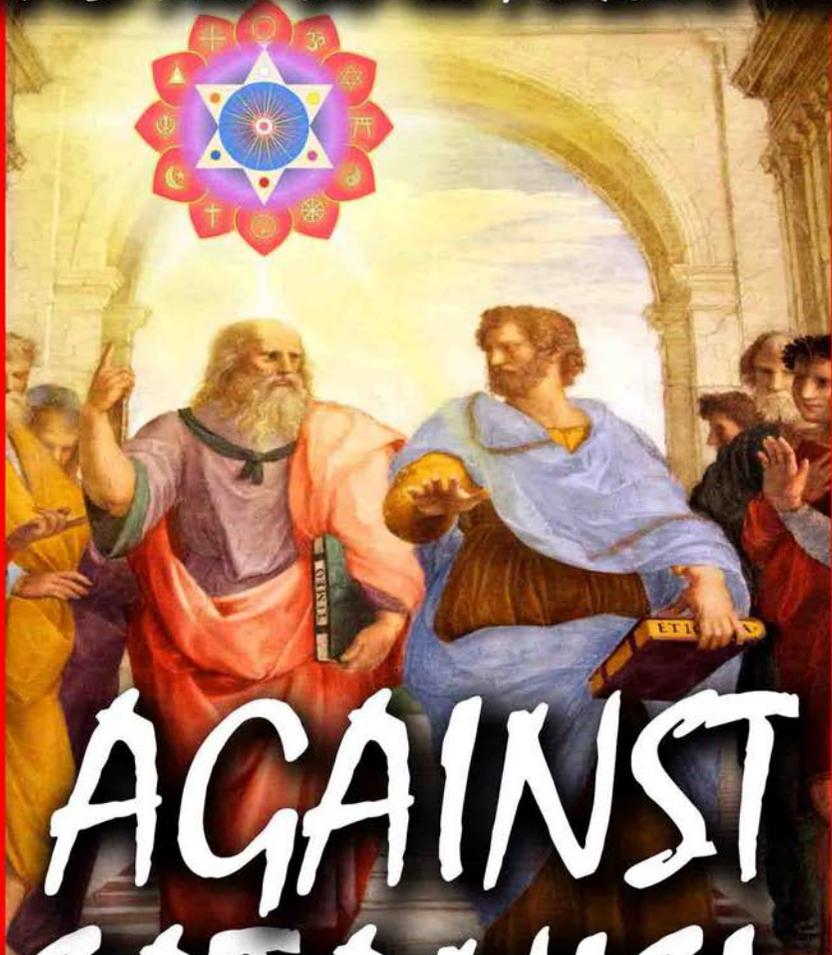
GOVERNMENT CONTROLLED BY SATANIC PEDOPHILIA, LOVELESS RITUAL SEX, SODOMY, RITUAL DRUGS, RITUAL BLOOD SACRIFICE, RITUAL HUMAN SACRIFICE, RITUAL TORTURE, RITUAL BURNING ALIVE, RITUAL CANNIBALISM, RITUAL CASTRATION.

FAKE ECONOMICS - Economists have been paid - Adam Smith (and his Satanic Mandevillian, "Public benefits come from Private Vices") was a hack, paid by Lord Shelburne, Head of the British East India Company, foundation of the British Empire - to create an Economics which would perpetuate the Bankers of the British Empire, later the Anglo-American Empire. Austrian Economics and it's Austerity - The Oligarchic Principle of Poverty - was supported and spread by Nelson Rockefeller. Solution? See Hudsons Modern Monetary Theory or Larouche Hamilton Credit Theory. The Economist Fake Gangs

SATANIC SABBATEAN FRANKISTS infiltrate Jews and Jewish organisations worldwide. Pagan Rituals and Myths used to pervert, degenerate and control a Jewish psychopathic ruling class of Donmeh Attaturk, Rothschilds, Rockefellers, Schiffs, Warburgs..

SATANIC KARL MARX - Wrote Das Capital from his MI6 provided office in the British National Museum under Ambassador Urquhart creating MI6 inspired Communism, Russian Revolution (65 millions tortured dead) and Mao's Chinese Revolution (85 millions tortured dead), and Socialism. George Orwell's Totalitarian text's "1984" "A Boot, stamping in your face, forever" - the Totalitarian or Legalist Fake Gangs sprang from this bough. Capitalists, Marxists, Communists and Socialists spring from the same Fake Gangs bough.

SATANIC PHILOSOPHY EUGENIC PLATO AND NO-SOUL ARISTOTLE



AGAINST SATANISM

RING OF CYGES - "CONCEALMENT OF WICKEDNESS"
BY HUMAN SACRIFICE

AGAINST SATANISM VOLUME TWO

The Secret History of the Modern World and the Battle for the Future -
The "One Ring" of Gyges of Plato's Book, Republic - A Comparison between
Ring of Gyges of the Hobbit and the One Ring of the Lord of the Rings with
reference to the effect of Eugenic No Heart Plato and No Soul Aristotle on
the Secret History of the Modern World and Satanic Globalism
- the Battle for the Future.

The difference between the simple Ring of Gyges of the Hobbit and the One
Ring of the Lord of the Rings is - "Into this ring he poured all his cruelty,
his malice and his will to dominate all life" -

The difference is this energy of cruelty. "By our sinning and Ritual human
sacrifices, and Ritual human sacrifices and sinning, the gods will be
propitiated, and we shall not be punished" - Plato's Republic

Used for one purpose "The Concealment of Wickedness"

Plato's Republic - WHAT IS THY NATURE? SATANIC ADEIMANTUS

"Appearance Tyrannizes over Truth and is Lord of Happiness"

Adeimantus of Collytus (432 BCE – 382 BCE) son of Ariston of Athens was
also known as Plato's brother. In Plato's Republic, Adeimantus questions
whether they would be living a good life with little or no personal property.
Consequently, Adeimantus is often associated with greed or love for money
in interpretations of the dialogue.

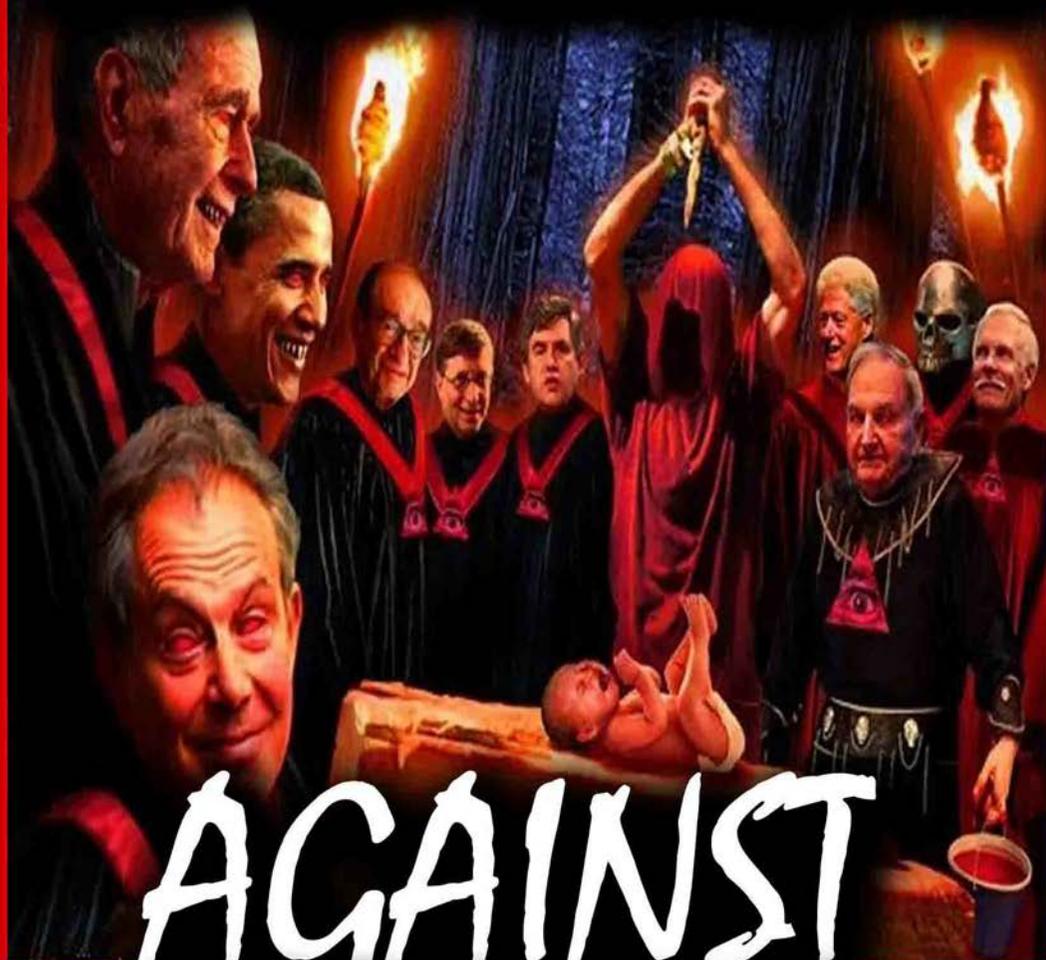
He quotes Pindar (522 – 443 BC) an Ancient Greek lyric poet from Thebes—
"Can I by justice or by crooked ways of deceit ascend a loftier tower which
may be a fortress to me all my days? For what men say is that, if I am really
just and am not also thought just profit there is none, but the pain and loss
on the other hand are unmistakable. But if, though unjust, I acquire the
reputation of justice, a heavenly life is promised to me."

"Let us be consistent then, and believe both or neither. If the poets speak
truly, why then we had better be unjust, and offer of the fruits of injustice;
for if we are just, although we may escape the vengeance of heaven, we shall
lose the gains of injustice; but, if we are unjust, we shall keep the gains,
and by our sinning and Ritual human sacrifices, and Ritual human sacrifices
and sinning, the gods will be propitiated, and we shall not be punished."

And here is where the elite get all their negative energy or as we call it in
Energy Enhancement - Trauma-Formed Negative Karmic Mass.. from Ritual
Human Sacrifice - a Satanic Ritual used in all civilisations on All Continents
by the Satanic Elites for tens of Thousands of years.

Yes Satanism, the Occult Cult was created 10,000 years ago before Christ,
and has been extant since that time in order to create the psychopaths which
rule humanity, grind us down, make us into feudal wage slaves barefoot and
back on the reservation, buying everything from the Amazon company store!
More Energy Enhancement
Meditation at...

SATANIC RITUALS HUMAN SACRIFICE



AGAINST SATANISM

SATANISM - 10,000 YEARS OF TOTAL CONTROL

AGAINST SATANISM VOLUME 3

SATANIC RITUALS AND HUMAN SACRIFICE

Sometimes people reading the Truth get depressed by it.

For people with big hearts though, the truth gets them started with an Implacable Opposition to Absolute Evil.

The Battle of Armageddon can only be won by sufficient Angels to fight against the Demons. Be an Angel!!

The point of this introductory missive is that 72 Empires have been recorded and every one of them has failed in the same way. The facts have been recorded that a totalitarian and satanic elite infil-traited and took over all these Empires and that 72 once free, flourishing and rich republics were destroyed from within.

Infil-traition of Satanism is the methodology as slowly every Government Ministry and Societal function is taken over. Eventually a Satanist becomes King Emperor President. The Satanist Pillars of Homosexuality, Pederasty, Drugs and Ritual Sex - both Hetero and Homosexual - are introduced overtly and the society is destroyed.

The Ancient Enemy who counts meditation and the mind control psychic arts as one of its main planks of World Domination has used Satanic Infil-Traitors for 10,000 years in every Organisation - Religion, Left and Right Politics, Dynastic Families, Geopolitics, Economics, Universities, Intelligence Services, Think Tanks, Banking, International Companies, Eugenics -

All of them Censoring Worldwide, Advanced Meditation techniques - Alchemical VITRIOL, the Kundalini Key and Energy Blockage Removal from every Meditation Program.. EXCEPT ENERGY ENHANCEMENT!!

The key is that the Satanic Religion and its current recruiting cults of Freemasonry and the Crowlean Sexual Ritual OTO - Ordo Templi Orientis - are Fake Gangs, created by men as a 10,000 years old technique to create psychopathic leaders and thus conquer the world.

All Rituals, Religion, Education, Secret Services and Political Movements have been Scientifically Engineered to create Fake Gangs for 10,000 Years. It's what the old Roman Empire, and the Babylonian Empire, and the Cult of Apollo, and the Byzantine Empire did before.

As you know, all the gangs have Rituals before you can join, making your bones with the Mafia means you must murder someone before you can join and Drug Cartels, secret groups within the Masons, the Hellfire Club, all have their Rituals before you can join and before you can progress. All Rituals, Religion, Education and Political Movements are designed to create fake gangs of psychopaths who can then be used to create control through chaos created poverty - The Oligarchic Policy of Poverty - destroying infrastructure - preventing human evolution.

SATANIC HOMO OCCULTISM
SATANIC HITLER



AGAINST
SATANISM

10,000 YEARS OF TOTAL CONTROL

AGAINST SATANISM VOLUME 4

SATANIC HOMO OCCULTISM SATANIC HITLER

Satanic Communism and Fascism is gradually being instituted as the New World Religion defined by Satanic Ritual.

72 Empires have been recorded and every one of them has failed in the same way. The facts have been recorded that a totalitarian and satanic elite infil-traited and took over all these Empires and that 72 once free, flourishing and rich republics were destroyed from within by Satanic Ritual.

From South America Incas and Aztecs to Satanic Pagan Odin, Cybele and Attis, Baal and Molech, and the Holy Inquisition, Ritual Human Sacrifice and burning alive and Ritual Homosexuality, Sodomy and Pedophilia has been endemic for Thousands of Years.

Read Against Satanism Volume Two - The Foundation of Western Philosophy is Pagan, Satanic, based on No-Heart Plato and No-Soul Aristotle. Plato's Republic (c.370 BC) propounded the "Concealment of Wickedness" and the use of Ritual Human Sacrifice to placate the Gods of Karma. Plato's Republic's ideal state is based on Sparta - The Spartan society was dominated by a rigidly Hierarchical and Elitist Pedophile Warrior Cult that featured mandatory induction of twelve-year-old boys into Homosexual Partnerships with adult men, and which Plato argues should be ruled by Autocratic Dictator Philosopher-Kings. The Republic propounds the Eugenic elimination of the family and the elimination of private property.

Infil-treason of Satanism is the methodology as slowly every Government Ministry and Societal function is taken over. Eventually a Satanist becomes King Emperor President. The Satanist Pillars of Homosexuality, Pederasty, Drugs and Ritual Sex - both Hetero and Homosexual - are introduced overtly. Christianity and Judaism - the bulwarks Against Satanism - are destroyed and then society fucked through the fear of Ritual Human Sacrifice.

The Ancient Enemy who counts meditation and the mind control psychic arts as one of its main planks of World Domination has used Satanic Infil-Traitors for 10,000 years in every Organisation - Religion, Left and Right Politics, Dynastic Families, Geopolitics, Economics, Universities, Economics, Intelligence Services, Think Tanks, Banking, International Companies, Global Warming, Eugenics -

Read Against Satanism Volume One - Satanic Karl Marx created Communism for Ambassador Urquhart of British Secret Services writing Das Capital in his Office in the British National Library in London. Communism was used by British Agents Satanic Lenin and Stalin and Satanic 33rd Degree Freemason of Yale University, Mao to take over Russia and China torturing and killing 160 millions of people.

All of them Censoring Worldwide, Advanced Meditation techniques - Alchemical VITRIOL, the Kundalini Key and Energy Blockage Removal from every Meditation Program..

EXCEPT ENERGY ENHANCEMENT!! The Energy Enhancement Video Course - energyenhancement.org

Read Against Satanism Volume Three - Satanism is Defined by Satanic Rituals - These Rituals Define Satanism.. Loveless Ritual Sex, Sodomy, Pedophilia, Ritual Drugs, Ritual Blood Sacrifice, Ritual Human Sacrifice, Ritual Torture, Ritual Burning Alive, Ritual Cannibalism, Ritual Castration.

This means Pedophilia Sex Rituals and means the Totalitarian Fear Control of Human Sacrifice. As presently occurs in Totalitarian No-Soul Communist China. Christians, Buddhists and Falun Gong are executed in special organ harvesting vans - Human Sacrifice.

They have ten of these vans in every city and they work all day long taking fresh organs to the airport for implantation in Japan. The organs harvested and sold to Rich Oligarchs Worldwide

Read Against Satanism Volume Four - SATANIC HOMO-OCCULTISM AND THE HOMOSEXUAL ROOTS OF FASCISM - Black Magician Homosexual Hitler created homosexual Cults based upon Black Magic - taught to him by Guido von List and the Armanen Order, Jorg Lanz von Liebenfels and Ariosophy, The Thule Society, Madame Blavatsky and the Theosophical Society, and Friedrich Nietzsche.

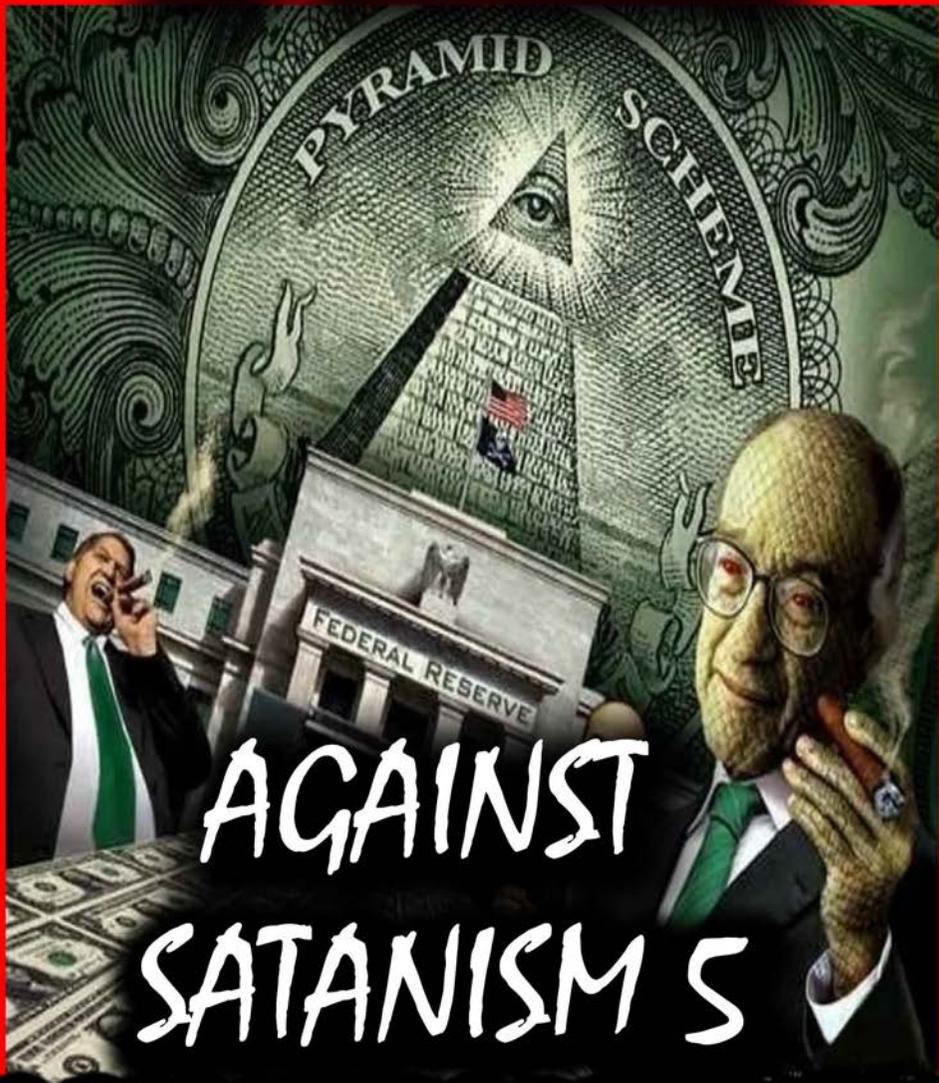
Because the Torah and the Bible prohibit Homosexuality, in order to introduce Satanism and its Satanic Rituals, Hitler decided to destroy Judaism and Also he changed Christianity - Jesus - into a Sun God associated with Odin by sending all Clerics to the Concentration Death camps along with the Satanic Ritual Burning Human Sacrifice Holocaust of Six Million Jews.

After that Hitler allied with Islam because Islam promotes Jihad Warrior Spartan Pedophilia and Sex Slavery of Women - "Women for breeding, boys for love" See, Thousands of Muslim child prostitutes in every city of Britain - Rochdale child sex abuse ring.. https://en.wikipedia.org/wiki/Rochdale_child_sex_abuse_ring

Hitler's NAZI is Satanic National Socialism, an offshoot of Satanic No-God Communism - You can see this plan occurring in Western Civilisation and China, everywhere, NOW!!

Read Against Satanism Volume Four - Homosexuality in Satanic Homo Occultism.. Satanic Homo Occultism, Satanic Hitler..

SATANIC ECONOMICS THE PRINCIPLE OF POVERTY



AGAINST
SATANISM 5

10,000 YEARS OF CONTROL

AGAINST SATANISM VOLUME 5

SATANIC ECONOMICS

THE 10,000 YEARS OLD OLIGARCHIC PRINCIPLE OF POVERTY..
To create a Humanity, "Dummed Down, Barefoot and Back on the Reservation"

The Satanic Vocabulary of Economic Deception
Against Satanism - The Satanic Principle of Poverty.. Banker Bankster Fraud Corruption Lies from
the Father of Lies.

Debt Forgiveness in History and the Satanic Vocabulary of Economic Deception -
How the Bronze Age saved itself from debt serfdom and Slavery.

Further intel on the turf war between the Satanic old eight families of Bankers, who took over the
world from the Satanic Aristocracy, and the Satanic Family of the Rockefellers

Agents, Mazzini, Urquhart and Napoleon III - as a Continuation of the same Satanic Psychopathic
Families from Satanic Psychopathic Babylon through the Satanic Psychopathic Roman Empire,
the Satanic Psychopathic Venetian Empire to the Satanic Psychopathic British Empire to the
current Satanic Psychopathic Anglo-American Establishment

Venezuela, Trump's Brilliant Strategy to Dismember U.S. Dollar Hegemony,
and Is Neoliberalism Killing Russia?

Argentina Gets Biggest IMF Loan in History. Argentina's New \$50 Billion IMF Loan
Is Designed to Replay Its 2001 Crisis.

Modern-Day Debtors' Prisons and Debt in Antiquity.

"What we are trying to do in this meeting today is to give you a new view of how the real economy
works today and teach reality economics, instead of
the parallel universe that you have in economic textbooks.

So, instead of learning how the economy operates, students are told how a
parallel universe might operate on a different planet, if there were no government, if there
were no fraud, if the entire economy operated on barter, if there was no debt, and
that everybody wanted to help everybody else, that nobody inherited money, that
everybody earned all of the income and wealth that they have. The reality is the
opposite, but it seems to be talked about only in novels these days.

"Whenever you have a misunderstanding of reality year after year, decade after
decade, and now for a century, when a false picture of the economy is painted
you can be sure that there is a special interest benefiting. A false picture of reality
does not happen by nature; it is subsidised. And the banking sector has subsidised
and paid for a junk economics that is taught in the universities, broadcast from
your newspapers, mouthed by the politicians, whose election they sponsor, to try to
make you believe, that you're living on Mars in a different kind of a world—instead
of the actual country that you're living in—and to pretend that there is no financial
class that is trying to grab what belongs to the public at large.

This is what ends up with a difference between central bank creation by the
government with the government aims of economic growth and full employment,
as compared with commercial bank credit that aims at economic shrinkage, at
austerity, at lower wages, at lower output, so that it can do to you what the
commercial banks are doing to Greece, to say give us your ports and your land
and your tourist areas and your water and sewer systems, so we can charge you
for water and sewer. And we can take the money that you had expected to get in pensions
and we can scale it down, so that we can pay ourselves.

"This is what it took an army in times past, And today it's done without an army, as long
as you will be passive and believe the Lies, the science-fiction of the world that banks
are painting. Thank you. [Applause]"

Remember, the main purpose is not money or power, it is in fact the Satanic
Oligarchic Principle of Poverty. Dummed Down, Barefoot, and Back on the Reservation.

ENERGY ENHANCEMENT SATANIC HISTORY TWO

JOHANNES FILIVS QVARTV
EDVARDI TERTII. REX
CASTELLÆ. ET LEGIONE
DVX LANCASTIÆ
CONSTABVLARIVS CASTI
DE QVEENSBORVGH. QVIN
TO OCTOBRIS ANNO
REGNI EDW TERTII ANN
GLIÆ 50. FRANCIÆ 37



AGAINST SATANISM Vol. 6

AGAINST SATANISM VOLUME SIX

Infiltrating Bloodline Phoenician/Jewish aristocratic Families have existed for over 5000 years before the Birth of Christ. Using emotional rhetorical religious concepts to control, they worship all the Pagan Gods, including Lucifer, Satan, Baal, Bel, Molech, Ashtoreth, Cybele and Attis including all the Satanic Rituals In Against Satanism Volume 3 - RITUAL SEX, RITUAL DRUGS, RITUAL BLOOD SACRIFICE, RITUAL HUMAN SACRIFICE, RITUAL PEDOPHILIA, RITUAL TORTURE, RITUAL BURNING ALIVE, RITUAL CANNIBALISM, RITUAL CASTRATION.

In this book we find that over thousands of years, spook, Bloodline Phoenician/Jewish aristocratic Families infiltrated every country, every Empire, taking over or infiltrating every ruling aristocracy and aristocratic, bloodline family, in Europe, Britain, America, India, China and in every other country in the World.

Jewish/Phoenician aristocrats were never attached to any tiny nation, but were always one globalized trading empire from 2000BC, playing countries against each other for profit. For example using a false Flag to start a fake war between ruling elites in separate countries both of which have been allowed, built up, to become rich, but all the elites in each country coming from the same Infiltrating Bloodline Phoenician/Jewish aristocratic Families, and then buying all the assets for pennies on the dollar after the war. Not only that, giving loans to each country to prosecute the war, owning the Military Academic Industrial Complex providing materiel for the war.

Many Infiltrating Bloodline Phoenician/Jewish families who have ruled the World as one trading block for thousands of years before the Birth of Christ came from the Fertile Middle East Crescent including Lebanon, Libya, Syria, Israel, Mesopotamia-Iraq, and Persia-Iran, and had that region and all it's Empires razed many times over nonetheless, profiting from each destruction. They hop to and fro over the planet, always profiting by shifting, reshuffling and breaking their Empires.

We saw that the important conquests are not in our history books as such. Rather, Europe was colonized in the Bronze Age already, in patterns that match up with structures we see in today's spook aristocracy. The entire upper class of colonized regions was replaced by Phoenician/Jewish families, with common people unaware of it to this day. Some of this colonization is cautiously admitted, just not emphasized.

We saw that the Infiltrating Bloodline Phoenician/Jewish families always held power. The secret behind their power is simply that there is no big secret. They don't know anything special. They can't do anything special. They never achieved anything special—other than monopolizing trade. With the power to deceive from the Father of Lies, owning all the media, - The CIA, the Military Academic Industrial complex, Universities, History, Books, Magazines, Newspapers, Television, Youtube, Facebook, Google - even idiots can rule the world for millennia.

ENERGY ENHANCEMENT
SATANIC HISTORY 3



AGAINST SATANISM
VOLUME 7

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AGAINST SATANISM VOLUME 7

The Cancer of The Venetian Empire - The Phoenician Empire - Metastases into the Anglo-American Empire.

The Suppression of Science

The Venetian Conspiracy - Webster G. Tarpley, Ph.D.

The Role of the Venetian Oligarchy in the Reformation, Counter-Reformation, Enlightenment and the Thirty Years' War - Preface - by Lyndon LaRouche

The Role of the Venetian Oligarchy in Reformation, Counter-reformation, Enlightenment, and the Thirty Years' War - Webster G. Tarpley, Ph.D.

Venice: The Methodology of Evil -- Part I by Donald Phau

Venice: The Methodology of Evil -- Part II by Donald Phau

Venice: The Methodology of Evil -- Part III by Christina N. Huth

650 Years Ago - How Venice Rigged the First, and Worst, Global Financial Crash - Paul Gallagher

How The Venetians Took Over England and Created Freemasonry - Gerald Rose

Giammaria Ortes: The Decadent Venetian Kook Who Originated The Myth of "Carrying Capacity" - Webster G. Tarpley, Ph.D.

How the Dead Souls of Venice Corrupted Science - Webster G. Tarpley, Ph.D.

Venice's War Against Western Civilization - Webster G. Tarpley, Ph.D.

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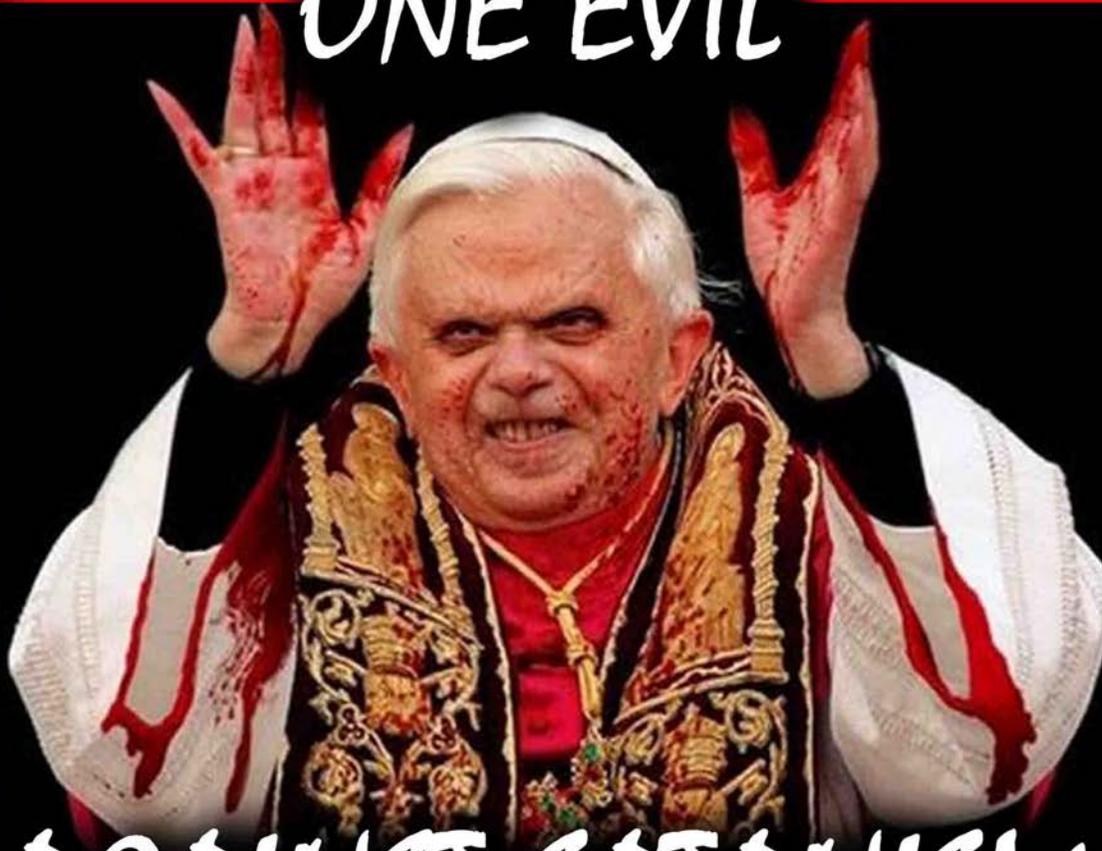
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ENERGY ENHANCEMENT
SATANIC HISTORY 4
ONE EVIL



AGAINST SATANISM
VOLUME 8

AGAINST SATANISM VOLUME 8

ONE EVIL

The Cancer of The Venetian Empire - The Phoenician Empire - Merges with the Satanic Catholic Church

The reputation and good behaviour of hundreds of millions of good Catholics in no way is questioned by highlighting the deliberate actions of a few thousand dedicated Satanists, Baalists and Luciferians who have caused world wars and sacrificed millions to demon gods.

The Roman Cult and associated networks of Sabbatsan and secret Satanic organisations since the 14th and 15th Centuries is the only time in the history of civilization whereby a "sacred" religious ceremony was established for the systematic and widespread encouragement of its clergy to Satanically ritualistically abuse children.

Following the death of Charles Martel in 741, Venerable Bede was once again called to undertake a massive project in forging key documents for the legal claims of the new Catholic Church first formed by the Pippins including: the Donation of Constantine and the Letter of St. Peter (Peter's Pence).

By the time of the death of "Saint" Francis of Assisi - Satanic Persian Bloodline Giovanni Bernadone Morosini (Moriconi) - Head of the Pisan International Trading Empire - Destroyer of Constantinople in 1204 selling 200,000 people into slavery - Destroyer of the Cathars, torturing and burning alive one million people - owning Genoa, Venice and Rome - Running all the trade from China, India and Europe - In 1253, he had indeed fulfilled his audacious promise.

"Saint" Francis of Assisi Founder of the Friari, was the 1st Christian Doge of Slave Trading, Bankster, Drug Running Venice (1249-1253)

"Saint" Francis of Assisi Founded the Holy Sea -- the joint trading venture partnership between Venice, England and the Pope of the Roman Cult. Later, the Venetian Empire, the Phoenician Empire, totally moved to and took over England the Venetian East India Company, British Empah and then formed the Anglo-American Empire.

Thus, World War One. 25 Million people, Dead!
Thus World War Two. - 25 Million people, Dead!
Thus Lenin and Stalin - 60 Million people Dead!
Thus Mao - 100 Million people, Dead!

Unlike some modern Satanist groups that seek to worship names like Satan or the Devil, Pope Honorius wrote of Moloch - the most ancient dark god of the Phoenicians, Carthaginians, Sadducees and Satanists. Moloch - the god of eternal fire and damnation - from where we get the word "Immolate" - to literally sacrifice people by fire.

That Pope Honorius III did deliberately write and publish one of history's most notorious black magic books, Grimoire of Honorius the Great, focusing especially on human sacrifice for the purpose of establishing the proper existence of witchcraft. Furthermore, that this was done to promote both the enterprise of witchcraft in the supply of manuscripts, babies and children for such satanic behaviour by wealthy (non Sadducee) nobility and to enable to profitable continuance of the Inquisition in public human sacrifice and seizing of assets of the sacrificed.

The principle is quite simple- a horrendous death BURNING in absolute pain will often result in a human mind (soul) being captured and used on the Astral Plane. If that soul also believes they were cursed in the process of their horrendous death they become a powerful magical force for those that killed them.

This is at the heart of necromantic philosophy for nearly two thousand years which can only be overcome by Meditation.

The Only defense is Meditation.

Because Meditation secretly rules the world to Steal your Spiritual Energy!

The Nazis also known as "The Nazis" -- a shortened name for the "Knights of the Reich" is a Roman Catholic spiritual and temporal (lay order) organization first formed in 1933 upon the signing of the "sacred" Reich Concordat between Franz von Papen (on behalf of Nazi Germany) and Cardinal Eugenio Pacelli (Pope Pius XII).

Himmler - who later became Head of the Jesuits - after the Reich Concordat was signed with the Vatican, Fr. Himmler was elevated in power, name and status above Hitler, Fr. Himmler S.J. as the Reichführer has superior title (as opposed to plain old führer for Hitler). Fr Himmler had complete independent control over all police, paramilitary, intelligence, scientific research and weapons development and the dreaded elite units of over 50,000 just in 1933--and Hitler had absolutely no authority over him.

When one considers that Nazi SS translates most perfectly into the meaning "Knights of the Holy See", that the role of Himmler best translates into the new Grand Inquisitor and that over 18 million innocent people were burned alive in human sacrifice camps in Poland and Russia, then the SS were without doubt the new "Holy Army" of a great inquisition against "heretics" orchestrated by the Vatican, Rome.

Remember, the main purpose is not money or power, it is in fact the Satanic Oligarchic Principle of Poverty. Dummed Down, Barefoot, and Back on the Reservation

Even though Tesla Free Energy Broadcast Power has been suppressed, these next pages show how Fusion power and Fission Power have also been suppressed due to a Policy of Poverty going back to Fra Paolo Sarpi of the Satanic Venetian Republic and the British Royal Society for Science...

The Suppression of Fusion Power Generation by the Oligarchic Satanic, "Principle of Poverty"

Although the Oil Companies benefit greatly, their profit is akin to selling Illustrated Texts whilst Fusion Power Generation is the new Gutenberg - HUMAN INGENUITY AND CREATIVITY FOR THOUSANDS OF YEARS HAS SOLVED EVERY RESOURCE PROBLEM.

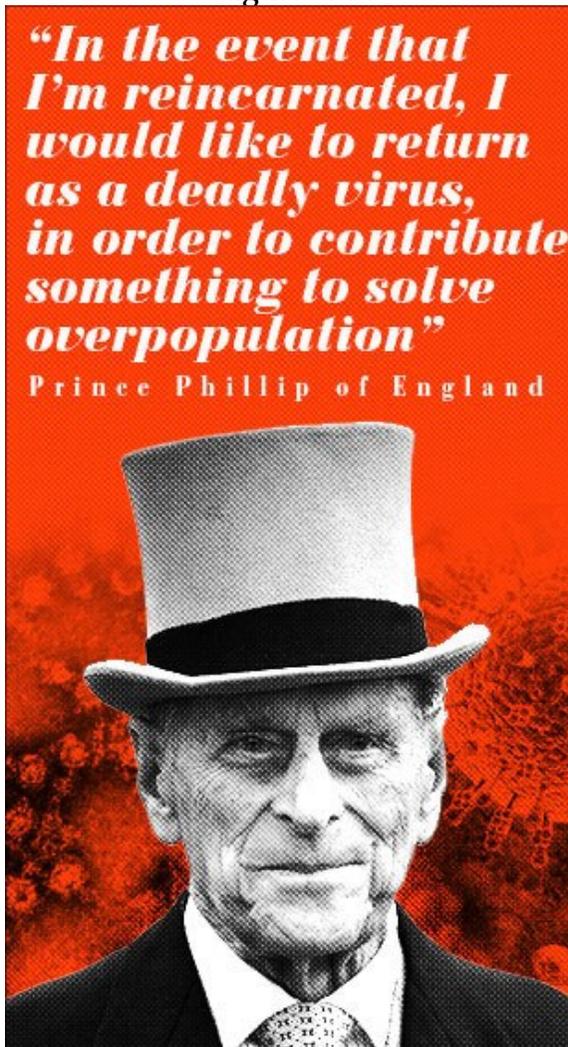
The fact that billions of people are not now already benefiting from the beginnings of a fusion economy was entirely intentional.

The For Ten Thousand Years the Pagan Satanists from Babylon have Continued to Steal Fire from Mankind as Zeus restrained and Punished Prometheus - ALL FOR CONTROL.

These Satanic Malthusians Demand Genocide

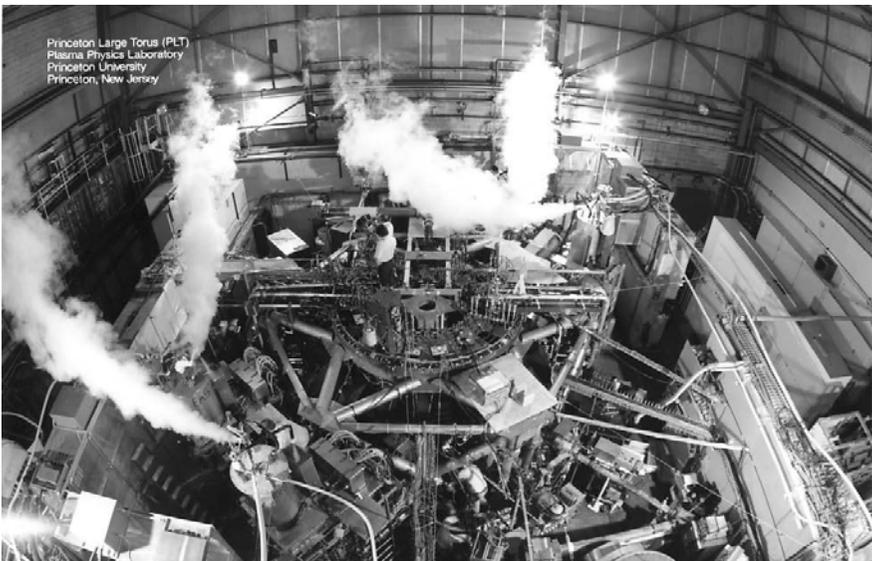
“Human population growth is probably the single most serious long-term threat to survival. We're in for a major disaster if it isn't curbed...We have no option.” —Prince Philip, interview in People Magazine, December 21, 1981

“In the event that I am reincarnated, I would like to return as a deadly virus, in order to contribute something to solve overpopulation.” —Prince Philip, Deutsche Press Agentur, August 1988



“It is almost self-evident that the greater the human population, the greater the demands for natural resources... The paramount question deals with an optimum human population. How many is too many people in relation to available resources? Many believe that our current (satanically consciously created) environmental problems indicate that the optimum level has been surpassed.” —Task Force on Earth, Resources and Population, George H. W. Bush, Chairman, July 8, 1970

“The decision for population control will be opposed by growth-minded economists and businessmen, by nationalistic statesmen, by zealous religious leaders, and by the myopic and well-fed of every description. It is therefore incumbent on all who sense the limitations of technology and the fragility of the environmental balance to make themselves heard above the hollow, optimistic chorus—to convince society and its leaders that there is no alternative but the cessation of our irresponsible, all-demanding, and all-consuming population growth.” —John P. Holdren, (Science Adviser to President Obama) and Paul R. Erlich, 1969



The achievement of controlled fusion has been at mankind's fingertips for decades. Had the trajectory established in the early decades of the U.S. fusion program continued, mastery of fusion as a power source would already be providing nations of the world with virtually unlimited energy, would have created a qualitative transformation in our powers of industry, transportation, and medicine, and would have completely revolutionized our species' power to transform the conditions of life on our planet through unprecedented rates of physical economic growth and development.

Satanic Agents Giamaria Ortes, Paolo Sarpi and Malthus who invented the limit of one billion people for the planet earth have already been surpassed by human Science, Creativity and ingenuity. Seven Billions now reside on Planet Earth. More People, less toxins and More wealth require Fusion Power!!

The failure to realize this promise is not due to its impossibility, nor to a lack of capability on the part of fusion scientists, engineers, and scientific institutions. Fusion is not "always fifty years away"; it has been deliberately suppressed under a top-down imperial policy, carried out via the mechanism of intentionally crippling budget cuts, which have created a factor of attrition strong enough to delay for decades what would have surely already been achieved. One merely has to envision where we would have been as a species today had fusion been achieved by the 1990s, as intended by leading fusion scientists in 1976.

1 Dean, S.O.: Fusion Power by Magnetic Confinement: Program Plan. U.S. Energy Research and Development Administration Report ERDA-76/110 (July 1976).

The undermining of fusion, typified by the dismally low FY15 budget request of the Obama administration, which proposes to shut down key fusion experiments in the U.S., must immediately cease. A fully funded, accelerated fusion program as a priority national mission is at the foundation of the survival and progress of our nation, and mankind as a whole.

Fusion: A New Era for Mankind

It was only at the end of the 19th century that mankind entered the atomic age and began to understand and harness the power of the atomic nucleus, a characteristic of matter inaccessible to the understanding gained from simply chemical processes. Radioactivity was first discovered in the 1890s, and it was in 1905 that Einstein proposed that a small amount of mass could be converted to a large amount of energy (in proportion to the speed of light squared, $E=mc^2$). Here was the conceptual birth of fusion power.

Whereas nuclear fission harnesses the energy released when a heavy atom (such as uranium, plutonium, or thorium) is broken apart, fusion reactions bring together the lightest elements (such as isotopes of hydrogen or helium), and is millions of times more energy dense than coal, oil, or natural gas, and an order of magnitude more energy dense than fission fuels. The fuels of fusion are also incredibly abundant, being found in seawater (in the case of deuterium, an isotope of hydrogen) or scattered throughout the lunar soil (in the case of helium-3), and could power the human species on Earth for billions of years.

It was determined in 1955 by John D. Lawson in the U.K. that three basic theoretical parameters would have to be met for a successful, sustained fusion reaction to produce energy over time. This is known as the Lawson criterion, and determines a minimum product of the temperature (energy) of the fusing ions, their density, and the minimum confinement time necessary to create conditions for a sustained, energy-producing fusion reaction to occur.

Given that the fuel would have to be heated to temperatures hotter than the Sun, no ordinary material could contain it. However, since the fuel is made up of charged particles, a different type of "wall," a magnetic field, can be used to

contain the reactants. Hence the birth of the “magnetic bottle.”²

The U.S. Fusion Program: Beginnings

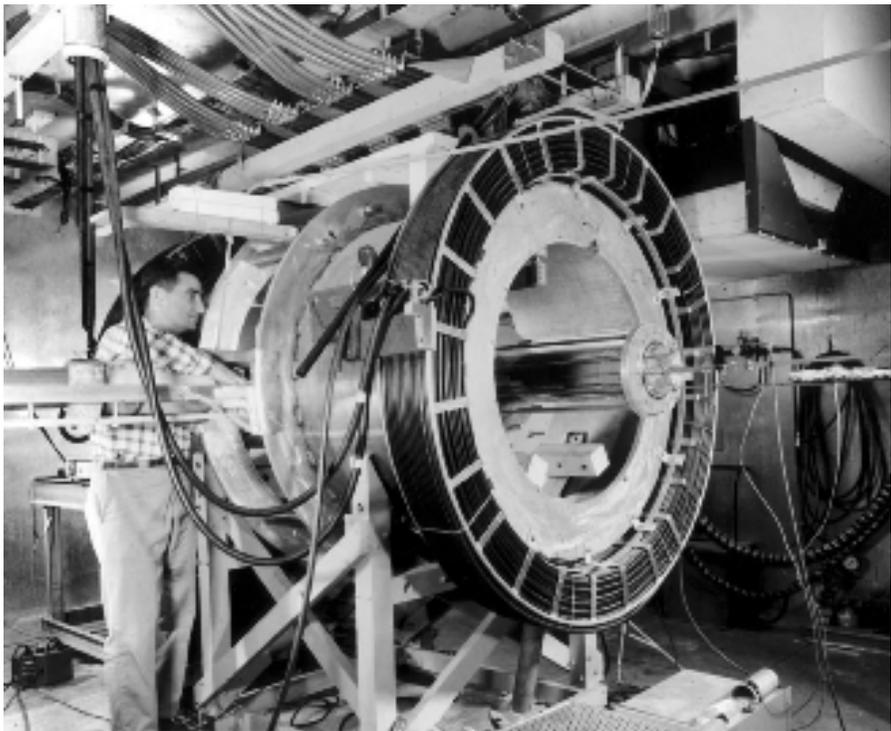
The early U.S. fusion program was born in the cradle of the U.S. national scientific laboratories, first with an attempt at Langley Memorial Aeronautical Laboratory (now NASA’s Langley Research Center) in 1939 by two young scientists, Arthur Kantrowitz and Eastman Jacobs.

This very early attempt failed to produce fusion, but was followed up throughout the 1940s by work at both the Los Alamos Scientific Laboratory (now Los Alamos National Laboratory) and Princeton University (today the Princeton Plasma Physics Laboratory). By 1946, it was concluded at Los Alamos that in order to achieve net energy from fusion, a steady state plasma would have to be heated to a temperature of around 100 million degrees ³—ten times hotter than the center of the Sun, and far beyond anything ever achieved on Earth.

Another approach to confining the fusion fuel is called inertial confinement, where a fuel target (e.g., a pellet of deuterium-tritium fuel) is heated and compressed by the effects high energy beams delivered to the outside of the target.

In 1951, Lyman Spitzer at Princeton was given a \$50,000 grant by the Atomic Energy Commission (AEC) to construct his design for a “stellarator,” a modified magnetic bottle, designed to counteract the “drift” of the plasma which arose in simple toroidal configurations and prevented fusion conditions from being reached within the plasma. The original stellarator program at Princeton included four proposed phases, Models A through D, with Model-D being a planned demonstration reactor.

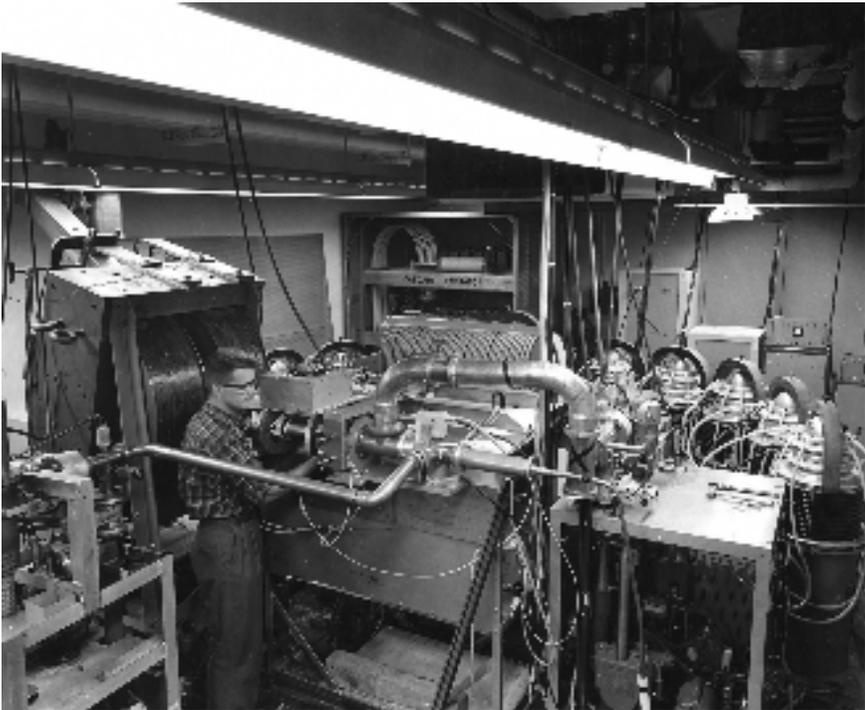
James Tuck at Los Alamos led the building of a project in the winter of 1952/53 which he named the “Perhapsatron”.⁴ The Perhapsatron was a toroidal magnetic bottle which would try to achieve fusion using a “pinch” concept. ⁵ The pinch and the stellarator designs, along with the “mirror machine”, led by Richard Post at the University of California Radiation Lab at Livermore (later Lawrence Livermore National Laboratory), formed the backbone of what became the U.S. classified program to achieve controlled thermonuclear fusion: “Project Sherwood”.



The Table Top mirror machine at Livermore

Funded by the AEC under the auspices of President Dwight Eisenhower's "Atoms for Peace" policy, and led by the same scientists who had harnessed the power of the atom in the form of nuclear weapons during the war, Sherwood sought to utilize the groundwork in nuclear research laid during

wartime, for purposes of peace and development. As stated by AEC Chairman Lewis L. Strauss in 1954, "Our children will enjoy in their homes electrical energy too cheap to meter.... It is not too much to expect that our children will know of great periodic regional famines in the world only as matters of history, will travel effortlessly over the seas and under them and through the air with a minimum of danger and at great speeds, and will experience a lifespan far longer than ours, as disease yields and man comes to understand what causes him to age." [6] Such was the natural optimism surrounding the scientific prospects of fusion.



The Scylla machine at Los Alamos (right) during the 1950s Project Sherwood days.

The existence of Project Sherwood was announced to the public leading into the IAEA's (International Atomic Energy Agency) first International Conference on Atomic Energy, held in Geneva in 1955, and limited international cooperation

began in 1956.[7] The project was fully declassified as part of the second International Conference on Atomic Energy in 1958. The same year, an experiment at Los Alamos became the first in any laboratory to produce neutrons from thermonuclear fusion: the Scylla I.[8]

Strauss, who as chairman of the AEC, increased the fusion budget from \$7.3 million[9] in 1951 to \$114.7 million by 1958, wrote of Project Sherwood: "The importance of 'Sherwood' as the project was called, now conceded to be at least theoretically feasible, can hardly be overstated, and I hope to live long enough to see the same natural force which powers the hydrogen bomb tamed for peaceful purposes. A breakthrough could come tomorrow as well as a decade hence. Out of our laboratories may come a discovery as important as the Promethean taming of fire."

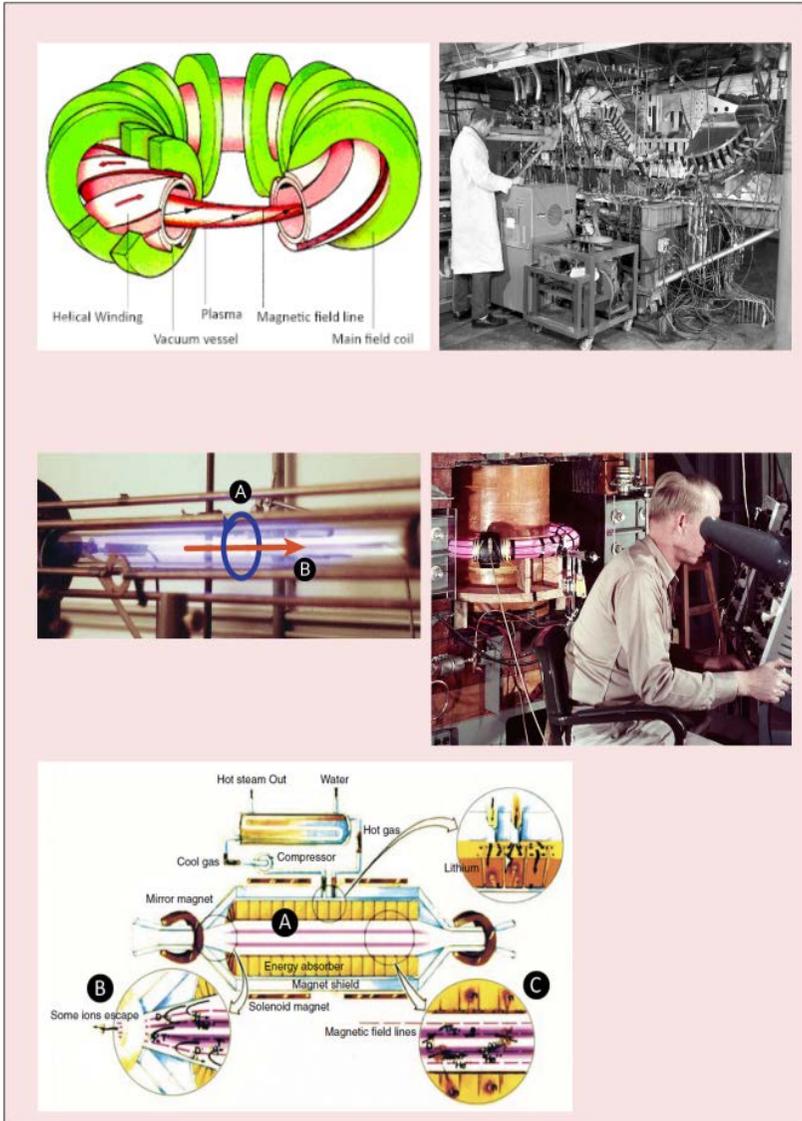
The 1960s

Spearheaded by the U.S., U.S.S.R., and U.K., work proceeded into the 1960s, and substantial fusion research also began in such nations as Germany, France, and Japan. Work on the Scylla design at Los Alamos continued, and by 1964, temperatures in excess of 40 million degrees were achieved by the Scylla IV, though confinement time was still quite short: less than 10 millionths of a second. In 1968, an announcement came from the Soviet Union that record temperatures and confinement times had been achieved with the Soviet tokamak design in its T-3 machine.¹⁰ When these breakthrough results were confirmed by a delegation from the U.K.'s Culham Laboratory in 1969, the world began converting their toroidal magnetic bottles to tokamaks, including the conversion of the Model-C stellarator at Princeton, which became the first U.S. machine to confirm the Soviet results.

Inertial fusion, in which fusion is triggered by a rapid application of energy to a pellet of fuel, also had its beginnings in the 1960s. With the invention of the laser in 1960, discussions began about the possibility of using a laser to set

off a “micro hydrogen bomb” which could be contained in a chamber and harnessed for energy, and the first patent applications for a laser fusion design were filed in 1969.

The tokamak design, begun in the Soviet Union in the 1950s, is a toroidal magnetic bottle with helically-wrapped coils, with a strong toroidal (along the axis of the tube) magnetic field.

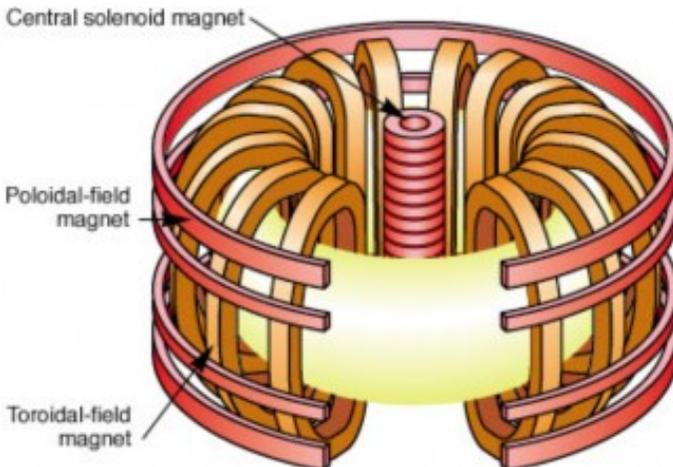


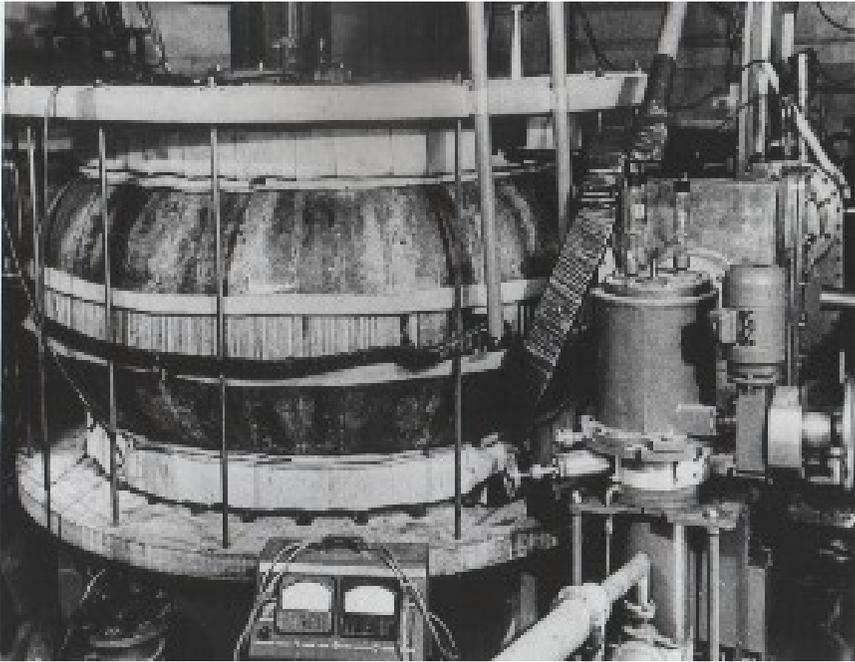
Fusion Designs

Stellarator, European Nuclear Society PPPL. The stellarator uses an externally-applied helical magnetic field to provide a twist in the path of the plasma particles, thereby counteracting net forces on the particles and keeping them on a “straight” path as they travel around the vessel. The earliest stellarators accomplished the same thing with a figure-8 geometry. Right: An early stellarator at Princeton.

Pinch The z-pinch design uses a magnetic field (A) to induce an electric field (B) in the plasma along the direction of the plasma flow. The charged plasma flow is pinched inward under the Lorentz force, into a thin, dense filament. Right: The Perhapsatron at Los Alamos.

Mirror This diagram of the Tandem Mirror design shows the basic principle of the mirror machine. Hot plasma in the center of the cylindrical reactor vessel (A) is contained within the chamber by two mirror magnets, which “plug” the ends (B) and turn (or reflect) most of the plasma ions back into the center where they undergo fusion (C). The mirror design was considered potentially more favorable for a commercialized reactor, because its linear design was easier to engineer and led to less instabilities in the plasma.





LLNL Basic tokamak design. The tokamak features two external magnetic fields (toroidal and poloidal) designed to contain the plasma long enough for fusion reactions to occur. The first tokamak, T-1, in the Soviet Union.

By the end of the 1960s, the fusion budget had risen from \$114.7 million in 1958 to \$140 million in 1968, allowing the groundwork to be laid for the breakthroughs to come in the 1970s.

The 1970s

By the early 1970s, the decision was made to elevate the fusion program to division status within the Atomic Energy Commission. By 1972, with a budget increase to \$144.7 million, a plan was mapped out for future fusion facilities and experiments designed to prove the scientific feasibility of

fusion.[11] A 1972 planning project within the AEC projected important results from the planned Princeton Large Torus (PLT) by 1978, and the follow-on operation of a physics test reactor, to produce 10 MW of fusion power, by 1984.[12] In 1971, a small tokamak, ORMAK, began operation at Oak Ridge National Lab, which would come to play an important role in the ability to raise the temperature of the plasma to thermonuclear levels. In 1973, approval was given for initial efforts at fusion power plant design by teams at the University of Wisconsin, General Atomics, Argonne National Lab, and Oak Ridge National Lab.

With a growing budget, three new tokamaks were approved for construction: the Alcator-A at MIT, the Doublet-II at General Atomics, and the PLT at Princeton. In 1974, the Atomic Energy Commission was abolished, and fusion research was rehoused under the newly created Energy Research and Development Administration, the precursor to the Department of Energy (DOE). The same year, even before operation of the PLT began, the Tokamak Fusion Test Reactor (TFTR) was approved for construction at Princeton as the follow-on "physics test reactor" to the PLT, with the expectation of achieving breakeven.

At Livermore, the "mirror machine" was well advanced from its humble beginnings during the Sherwood days, and in 1975, the 2XIIB at Lawrence Livermore achieved plasma parameters comparable to those being achieved in the more widely worked-on tokamaks. In 1977, a new design, the Tandem Mirror Experiment (TMX), intended to solve the "end plug" problem,[13] was approved. The TMX began operation in October 1978, and its success led to the approval of the more advanced Mirror Fusion Test Facility (MFTF), to be completed in 1985.

As the 1970s progressed, and the great pace of advancements in all three mainline approaches (tokamak, pinch, and mirror machine) accelerated, steps were taken to accelerate fusion research through expanded international cooperation. In 1973, President Richard Nixon and Soviet leader Leonid

Brezhnev signed an agreement on the Peaceful Uses of Atomic Energy. The first U.S. team to travel to the U.S.S.R. under the agreement was a fusion team, which was casually briefed on a technique being developed for inertial fusion which corresponded quite closely to very highly classified work being done in the U.S. at the Sandia Laboratory.

The mirror design is an open-ended, straight magnetic bottle with two strong “mirroring” magnetic coils at the ends of the tube, which turn the plasma flow back toward the center of the machine. The linear design was suggested to be better for commercialization than the tokamak, as all sides of the machine are accessible for maintenance and repair, and because its plasmas tended to be more stable than in the closed, toroidal designs. However, too many ions were leaking out the ends. Hence the “end plug” problem.



EIRNS Top James R. Schlesinger, whose Malthusian views wouldn't allow the realization of practicable fusion power, leading to his efforts to delay and undermine fusion during his tenure as Energy Secretary, from 1977-1979.



And Bottom Congressman Mike McCormack, sponsor of the 1980 Magnetic Fusion Energy Engineering Act, speaks to a meeting of the Fusion Energy Foundation in May, 1981.

While the perspective for a robust fusion program seemed to characterize the early part of the decade, the end of the 1970s would prove to be a decisive collision point on issues of global policy.

The PLT and the Magnetic Fusion Energy Engineering Act

The Princeton Large Torus, which produced its first plasma in 1975, would soon take center stage in a policy fight that stretched far beyond the bounds of so-called “scientific research.”

In late July, 1978, reports came that scientists at Princeton had succeeded in using auxiliary heating in the PLT, demonstrated first with Oak Ridge’s ORMAK14 tokamak, to raise the temperature of the plasma to a level never before achieved—over 60 million degrees—for the first time surpassing the minimum temperature required for ignition, 44 million degrees.¹⁵ Achieving this temperature milestone was especially significant, since the Alcator tokamak at MIT had recently shown that it was possible to confine a plasma at the needed density for a long enough time to achieve ignition.¹⁶ Breaking the temperature threshold for ignition broke a psychological threshold, too. As put by Dr. Stephen Dean, head of the Confinement Systems Division in the Office of Fusion Energy at DOE, “The question of whether fusion is feasible from a scientific point of view has now been answered... It is the first time we’ve produced the actual conditions of a fusion reactor in a scale-model device.”

While news of the breakthrough was excitedly disseminated around the fusion community, it was determined that the official announcement could not be made public until the upcoming August 23 IAEA fusion meeting in Innsbruck, Austria. News, however, did get out to the press, after which the DOE leadership under Secretary of Energy James Schlesinger did everything possible to downplay the importance of the results, including an attempt to stop a DOE press conference scheduled for August 14 (which did, after all, go forward, though with the

ORMAK had succeeded in producing a temperature of 20 million degrees with neutral beam heating, a type of auxiliary heating—triple what had been achieved less than a decade earlier in the T-3 tokamak.

Of a deuterium-tritium (or D-T) plasma. Mel Gottlieb, head of the Princeton Lab, told an August 14, 1978 press conference, "It took us seven years to go from several million degrees to 26 million in December 1977, and then just six months to go another 35 million."

These were the three parameters outlined by Lawson in order to have a net power-producing fusion reactor: plasma density, confinement time, and temperature.

conspicuous exclusion of the head of the DOE Fusion Office, Ed Kintner). Schlesinger's DOE insisted that the results obtained at Princeton were not, in fact, a breakthrough, and that fusion was just as far away as ever. John Deutch, DOE Director of Energy Research, echoed his boss by saying that these results were good for Princeton, but were not a breakthrough.

This suppression is not surprising from one such as Schlesinger, who wrote in his 1960 *The Political Economy of National Security*: "Economics is the science of choice in a world of limited resources... We have gone around the world spreading the 'gospel of plenty' raising the level of expectations... [but] in the nature of things, these rising expectations can never be satisfied... We must in our strategic policy return to the days before the Industrial Revolution... [and] prepare to fight limited wars."

Not everyone in positions of policy-making agreed with the Malthusian Schlesinger, however. Congressman Mike McCormack of Washington state seized the momentum created by the PLT results to convene a scientific advisory panel in the Congress which met over the course of 1979, and concluded that the biggest barrier to fusion was a lack of political commitment, and an inadequate level of funding. Meanwhile, the public interest in fusion boomed, with

subscriptions to Fusion magazine, published by the Fusion Energy Foundation (FEF)¹⁷ soaring to 100,000—making it the second most widely circulated science magazine in the nation.

The FEF played a critical role throughout the 1970s and into the 1980s, in educating the public and policymakers alike on fusion, with dozens of seminars held around the world, in addition to Fusion magazine, faceto-face organizing, and in publicly taking on the political fights against the attempts to sabotage fusion. In October of 1978, in response to the optimistic breakthrough at Princeton, the FEF released a memorandum to Congress outlining an acceleration in the fusion program, and a proposed budget comparable to that of the 1960s Apollo Program.

In January 1980, Congressman McCormack announced at a conference on nuclear safety in Washington, D.C. that he would be introducing legislation to “make it the policy of the U.S. government to bring the first electric-generating fusion power plant on line before the year 2000.” He said, “We must move into the engineering phase with fusion. We must not wait for somebody else to do it... Once we develop fusion, we will be in a position to produce enough energy for all time, for all mankind. This is not hyperbole, but fact.” In a subsequent interview, in contrast to the outlook of Schlesinger, McCormack said that fusion “could be the most important deterrent to war in all of history.”

The FEF, founded in 1974 by Lyndon LaRouche, had been crucial in making sure that news of the PLT breakthrough got out to the public, and to the White House, helping to ensure that the planned press conference was able to go ahead. See: “Schlesinger vs. Fusion: A Dossier.” EIR, August 29, 1978, and “The Coming Breakthroughs in Fusion,” Fusion, October, 1978.

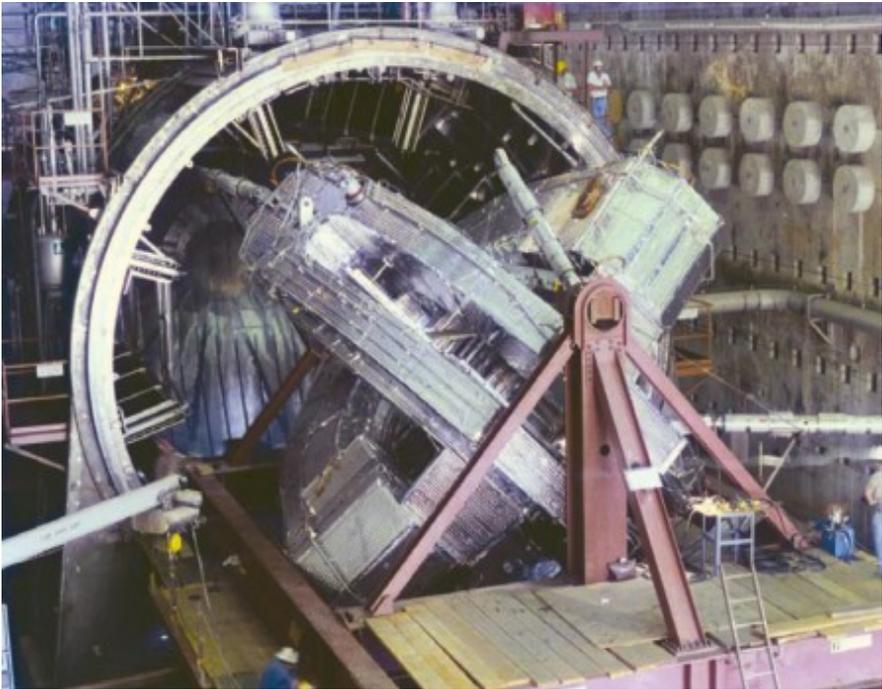
The bill which became the Magnetic Fusion Energy Engineering Act of 1980 authorized the construction of an Engineering Test Facility by 1987, and for the first experimental power reactor to put net power on the grid by 2000. Funding authorization also included the expansion and upgrading of the nation's science education programs. It had an estimated cost of \$48 billion over two decades. Quickly gaining 140 co-sponsors, the bill passed the House overwhelmingly on August 27 by a vote of 365 to 7. The Senate passed a companion bill by voice vote soon after, and the Magnetic Fusion Energy Engineering Act of 1980 was signed into law by President Carter on October 7th.

However, losing his bid for re-election the following month,¹⁸ McCormack would not be in the Congress to oversee the implementation of the 1980 law. A report issued in December by McCormack's Subcommittee on Energy Research and Production warned the incoming administration and the nation, quite prophetically, that "...the hardest battles are yet to come. There must be continual annual authorizations and subsequent appropriations of funds... It will take tremendous vigilance and determination on the part of the nation to carry through the 20-year development plan which is necessary to make fusion a reality."

A Commitment Reversed

Mere months after the Magnetic Fusion Energy Engineering Act was signed, the incoming Reagan administration submitted its first budget for FY1982, with a request for fusion funding which would make the implementation of the fusion law impossible. The 1980 law mandated that "The Secretary of Energy shall develop a plan for the creation of a national magnetic fusion engineering center for the purpose of accelerating fusion technology development via the concentration and coordination of major magnetic fusion

engineering devices and associated activities at such a center.” However, in July of 1982, by which time the Secretary of Energy was to have submitted a plan for carrying out the establishment of the engineering center, the DOE replied via acting Director of Energy Research, Doug Pewitt, “We have determined that it is premature to establish fully the national magnetic fusion engineering center at this time,” and instead proposed that an “Engineering Feasibility Preparations Project” be established at an existing fusion research site.



LLNL The MFTF under construction in 1981. The reactor was fully completed, but then mothballed before it could ever run an experiment! The reactor vessel and structures weigh 8 million pounds, including 3 million pounds of superconducting magnets, designed to confine a plasma at more than 100 million degrees.

In protest over this betrayal, Ed Kintner resigned his post as Director of the Office of Fusion Energy at DOE in November 1981. Writing the following year about the budgetary attacks

on fusion, Kintner said that the fusion budget offered by the administration for FY1983 was not only lower than what was needed to carry out the 1980 act, but was 25% less than the budget for 1977! He said that this “leave[s] the fusion program without a strategic backbone—it is a collection of individual projects and activities without a defined mission or timetable... The plan to increase industry involvement in fusion development is postponed indefinitely, and the industrial and economic benefits of high-technology spin-offs, surely an increasingly important by-product of an accelerated fusion technology program, will be lost.”¹⁹

Due to the early concession of Jimmy Carter to Ronald Reagan before polls had closed on the West Coast, many Democrats didn't bother to vote, meaning that many Democratic candidates for both state and federal positions lost their elections.

One month after Kintner's resignation, George Keyworth, science adviser to President Reagan, announced to a hearing in Congress: “The U.S. cannot expect to be pre-eminent in all scientific fields, nor is it desirable.” The official position of the U.S. government became, from Keyworth's mouth: “It is not the government's responsibility to conduct energy R&D and pursue energy independence. It is the responsibility of private industry.” Keyworth added, sophistically, that abundant funding “... can even promote mediocrity, rather than stimulate excellence.” How far the U.S. government had come from the vision of Kennedy's Apollo Program!²⁰

In December 1982, almost as if in defiance of the growing attacks on the fusion program, the workhorse Thermonuclear Fusion Test Reactor (TFTR) at Princeton produced its first plasma, and would go on in 1986 to set the record plasma temperature of 200 million degrees. Also in 1986, however, a great casualty was suffered at Lawrence Livermore Lab, where the “mirror” approach had been progressing with encouraging results: funding for the operation of the Mirror Fusion Test Facility (MFTF) was cut from the budget, and the MFTF was

mothballed on the same day that it was officially completed, without ever being allowed to run a single experiment. The mirror program had been successfully killed, squeezed out of a rapidly constricting budget.

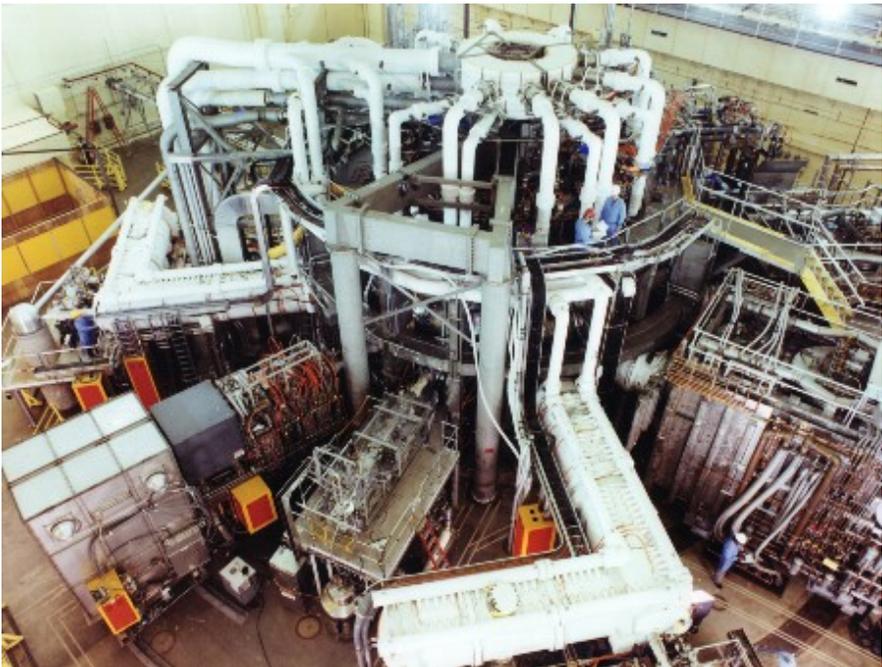
By the end of the 1980s, there was absolutely no scientific reason not to capitalize on the success of projects such as the TFTR, and the great knowledge of the teams assembled at Princeton and elsewhere, to move to the next stage in the tokamak program: the creation of sustained fusion power. The cause of the failure to do so, even to this day, has been purely political. In 1988, the team at Princeton submitted a completed design for the follow-on to TFTR, the Compact Ignition Tokamak (CIT), which would demonstrate a sustained “burning” plasma by the year 2000.²¹ However, in October 1989 it was announced by President George Bush, Sr.’s DOE representative, Robert Hunter, that such an advancement simply wasn’t in the budget, and that an additional \$50 million dollar cut to the fusion budget would be coming down the pipe. Hunter told a Congressional hearing that the CIT was too risky, and probably would not succeed. Dr. Stephen Dean (former head of the magnetic confinement systems at the AEC and DOE) responded that, “We’ve got to take some risks if we intend to develop a machine that makes electricity. If Columbus had waited for radar to be discovered before he set out, we wouldn’t be here today.”

That \$50 million cut, \$12 million of which came from the Princeton facility, virtually ensured the cancellation of the CIT project, and the facility was forced to lay off 120 personnel, scattering the knowledge base assembled there, and delivering a severe blow to morale well beyond the bounds of Princeton. As outlined below, these cuts were not merely the folly of a gaggle of fiscally minded bureaucrats; they were the key mechanism for carrying out an intentional policy to kill fusion.

As the 1990s approached, the fate of fusion research in the United States was very much in jeopardy. The earliest of the 1976-predicted dates that a demonstration reactor could have been put on the grid had come, and the intentional sabotage of both the planned experiments and the creative optimism of the community of fusion scientists, growing both in numbers and in competence, was having its effect.

Kintner, E.E. "Casting Fusion Adrift." MIT Technology Review. May/June 1982.

“Those who came before us made certain that this country rode the first waves of the industrial revolutions, the first waves of modern invention, and the first wave of nuclear power, and this generation does not intend to founder in the backwash of the coming age of space. We mean to be a part of it—we mean to lead it.” John F. Kennedy, September 12, 1963, Rice University, Texas.



PPPL The Tokamak Fusion Test Reactor at Princeton. TFTR operated from 1982 to 1997, setting many significant records both in plasma temperature and in peak fusion power produced, before it was prematurely shut down.

A burning, or ignited plasma means that the fusion reactions occurring in the fuel are able to maintain the necessary temperature for a sustained reaction without the additional input of auxiliary heating (just as a fire requires initial input, but will burn as long as there is fuel available). The term “burning” does not indicate a literal flame in the plasma, but that the “fire” of fusion is a descendent of the original gifts of Prometheus to man.

The 1990s and ITER

With the U.S. fusion program being slowly choked off by year after year budget cuts, to the effect of an increasing loss of smaller and “alternative” (i.e., not either tokamak or inertial fusion design) fusion experiments at the national labs and universities, attention shifted to an “outside” hope: the U.S. involvement in international collaboration on the large tokamak, ITER.²² Initiated in November 1985 from the “Reagan-Gorbachev Agreements,” ITER was to be a very large tokamak, designed and built jointly by the U.S., the U.S.S.R., European nations, Japan, and Canada,²³ with the hopes of producing 500MW of fusion power, sustained over 480 seconds, and would be the precursor to a DEMO tokamak reactor, designed to put power on the grid.

Meanwhile, the TFTR at Princeton, despite the increasingly hostile and crippling budget cuts and delays, set a series of record plasma temperatures and would go on in 1994 to achieve the major milestone which had been mapped out in 1972: the production of a peak fusion power of 10.7 MW—90 million times what was possible in the early ‘70s, when the

experiment was first proposed.²⁴ Just one year later, TFTR set another record plasma temperature of 510 million degrees.

Just two years after TFTR had set this high record, however, it was decommissioned in an astoundingly irresponsible act of budget cutting, in the midst of Newt Gingrich's "Conservative Revolution", and was finally dismantled in 2002. Its sister tokamaks, the Joint European Torus (JET) and the JT-60 in Japan are operational (with significant upgrades) to this day, and have gone on to surpass the records set by the prematurely-retired TFTR.

In 1999, two years after TFTR was decommissioned, the U.S. shocked the world when the Congress refused to allocate a mere \$12 million for continued participation in ITER, forcing the U.S. to withdraw from the program. The reason given by Chairman of the House Science committee James Sensenbrenner was that, "It defies common sense that the United States should agree to continue to participate in a dead-end project that continues to waste the American taxpayer's dollars." Had this cut to ITER been paired with a restoration of funding to re-open the shuttered domestic program, perhaps Sensenbrenner's ignorant comment would have been made more palatable. However, this was not the case.

Funding for domestic research has continued to fall year after year, since its peak funding year in 1982,²⁵ culminating in the astoundingly low budget allocations of the Obama administration, which are threatening shutdown of the MIT Alcator C-Mod, among other incredibly valuable programs.²⁶

Whence the reversal of the success and optimism which drove the great progress made in fusion research in the 1970s? Why was the 1980 Magnetic Fusion Energy Engineering Act never allowed to be implemented? As outlined below, fusion was not

the happenstance victim of the fiscally conservative environment created following the “days of plenty” of the 1970s.

The fact that billions of people are not now already benefiting from the beginnings of a fusion economy was entirely intentional.

The exception to this has been a rise in the domestic program for inertial fusion (funded under defense programs), with the building of the National Ignition Facility at Lawrence Livermore National Lab. However, peak funding of inertial fusion came in 2006, with much of the recent work at NIF laying more of an emphasis on weapons testing, rather than fusion.

And what is being offered in place of fusion? Take the statement of President Obama on how to solve the world’s energy needs: “We wouldn’t need new technologies. We wouldn’t need to invent some fancy new fusion energy or anything. If we just took our existing building stock in homes and insulated them, had new windows—schools, hospitals, a lot of big institutions—we could squeeze huge efficiency out of that.” Speech in Fairfax, Virginia. September 13, 2010. A continuation of the shift to “green” technologies will lead to mass death.

The Club of Rome, a self-styled “old-boys’ club” set up by fascist elites Alexander King and Aurelio Peccei, has served as a central coordinating body and control mechanism over governments, via its integration with institutions such as the U.N. and OECD, to impose policies of population control. In a 1981 interview with EIR, King lamented, “The United Kingdom is no longer a white country! The whole of Europe is changing. And even at the present rate, the white race is finished... I think in many ways we are overpopulated any way, but in the best of all possible worlds, there will be rather

fewer people everywhere.” See: “The Inside Story of the Club of Rome,” EIR, June 23, 1981.

For example, Jaime Roldós of Ecuador (1981), Omar Torrijos of Panama (1981), and Indira Gandhi of India (1984). See: “Interview with John Perkins: ‘There's a Tremendous Opportunity for Change’,” EIR, December 10, 2004.

For more on the Nuclear Club of Wall St., founded to counter the influence of the Fusion Energy Foundation, see: “Hit Men vs. LaRouche's Fusion Energy Foundation.” http://www.larouchepub.com/other/2004/3147_hit_men_vs_fef.html

The International Thermonuclear Experimental Reactor, now under construction in Cadarache, France.

This group today includes: the U.S., E.U., Russia, Japan, India, China and South Korea. For more on the history of U.S. involvement in ITER, see: “Fusion Energy Moves One Step Closer,” EIR, December 12, 2003.

This was superseded three years later by the Joint European Torus (JET), which produced 16MW, still the current world record.

Library of Congress

Secretary of State Henry Kissinger, seen here with President Gerald Ford, presided over the implementation of NSSM 200, and worked to ensure that the British Empire policy of population reduction supplanted the pro-growth and pro-progress policies of John F. Kennedy.



Evil Policies and Evil People

The U.S. economy will require large and increasing amounts of minerals from abroad, especially from less developed countries. That fact gives the U.S. enhanced interest in the political, economic, and social stability of the supplying countries. Wherever a lessening of population pressures through reduced birth rates can increase the prospects for such stability, population policy becomes relevant to resource supplies and to the economic interests of the United States... Although population pressure is obviously not the only factor involved, these types of frustrations are much less likely under conditions of slow or zero population growth. —NSSM 200, 1974

This frankly evil statement "The Principle of Poverty" by the deranged Henry Kissinger, contained in National Security Study Memorandum 200 (NSSM 200), written in 1974 under his direction at the U.S. State Department, was not just an idle threat to peoples of the third world; it was signed into law as official U.S. policy by President Ford in December 1975. Three

years earlier, the Club of Rome,²⁷ founded in 1968, had released their genocidal tract, *Limits to Growth*, laying the “scientific” (though actually inept and quite fraudulent) basis for policy measures which would reduce the world’s population, based on the myth of limited resources and the denial of revolutionary scientific progress, such as that promised by fusion. While one form this policy took was CIA-run coups d’état to depose world leaders who were too tenacious in their national development policies, ²⁸ NSSM 200 was to be implemented domestically as well, as the earlier assassination of John F. Kennedy had so vividly forewarned. A major manifestation of this was the deployment of the “slush fund” of Wall St. moguls, the Nuclear Club of Wall Street,²⁹ to pour money into halting the shift from a fossil fuel-based economy to a fission economy, and to castrate fusion before it could truly get off the ground. After all, the prognosis that fusion could set mankind free from poverty with virtually unlimited energy, the end of famine, and greatly extended average lifespans was simply unacceptable to those who believed, as did the ancient Zeus, that those who ruled had a duty to control, and sometimes cull, the multitude.



NFRI

South Korea's KSTAR tokamak in 2009. KSTAR is one of two superconducting tokamaks in the world, with a goal of training a generation of young fusion scientists and engineers to contribute both to the international ITER project, and to South Korea's own expanding fusion program. Pictured are Dr. Myeun Kwon, current president of the National Fusion Research Institute, and Marsha Freeman and Bill Jones of Executive Intelligence Review.

In order to have a large-scale effect on national economies, energy-intensive industry, which drives economic growth, was put in the crosshairs. Following the orchestrated energy crisis of 1975 (and Carter's plea to Americans to turn down their thermostats and put on a sweater), cutbacks in energy usage were imposed on the industrial sector as well, initiated by the reduction of energy usage in Pittsburgh steel manufacturing with Schlesinger's "Project Pacesetter" in April 1977. That policy was successful. Since that time, average per capita energy consumption for the total population has leveled off, and is now beginning to fall, rather than growing to the levels projected by the Kennedy administration, which were nearly double those of today.³⁰

It's no wonder, then, that in August 1978, Schlesinger, on behalf of the policy of zero growth, had done everything possible to contain news of the PLT breakthrough: if fusion were indeed on the horizon, the myth that population growth is inherently unsustainable would be shattered—along with the primary justification for the ongoing implementation of policies to shut down global development.

What Must Be Done

With the successful postponement of fusion, the world now sits on the edge of a precipitous collapse in global population. The average age of the fusion scientist in the U.S. is rising.

Elder scientists who made the breakthroughs of the past decades are retiring. Teams which are built one year at research institutions are often scattered the next, and machines once mothballed are dismantled and lost. We are rapidly losing the capabilities which have been built up over the past six decades! More fundamental, however, is the damage done to the process of creative hypothesis itself. The pessimism of an environment where one's experiment has a good chance of being shut down in the next 12-month budget cycle, regardless of its successes or potential contributions to the future, can stultify the creative process itself, which is driven by passion and optimism for the future.

Mankind survives as a species because he progresses. The great leaps in the energy density of each successive fuel source of man's "Promethean fire" (wood, charcoal, coal, coke, fossil fuels, etc.) have each corresponded to a revolution in man's power over nature, and a non-linear increase in, simultaneously, the potential population density and the power applied per capita.³¹ Only fusion can ensure the continued survival of the human species in the immediate decades ahead, and the capability of making the discoveries which lead to the next great leap forward.

"Civilian Nuclear Power: A Report to the President—1962," U.S. Atomic Energy Commission, Leland Haworth, Chairman.

This must be a global effort. Though over the past 30 years, the U.S. program has been under significant attack, and is currently struggling to keep its doors open, nations of Asia have been making significant progress, and have become leading partners in a global effort. China and South Korea, for example, have both made incredible strides in their fusion programs over the past 15 years, and have the only two advanced superconducting tokamaks in the world, EAST in China, and KSTAR in South Korea.³² Both nations have built impressive domestic fusion programs with very serious goals,

budgets, and timetables, geared toward post-ITER DEMO engineering reactors.

See “Measuring Fire: Energy Flux Density,” in Physical Chemistry: The Continuing Gifts of Prometheus. <http://www.larouchepac.com/Prometheus>

For more on China's EAST tokamak, see: http://www.larouchepub.com/eiw/public/2011/eirv38n10-20110311/46-54_3810.pdf and for South Korea's KSTAR tokamak, see: http://www.larouchepub.com/eiw/public/2009/2009_40-49/2009_40-49/2009-47/pdf/2835_3647.pdf

Due to foot-dragging and budget cuts, largely on the part of the U.S. government, the date of the first plasma of ITER has been delayed numerous times, and is currently not expected until 2023, or possibly 2025. Operation of its successor, DEMO, is not scheduled to begin until at least 2033.

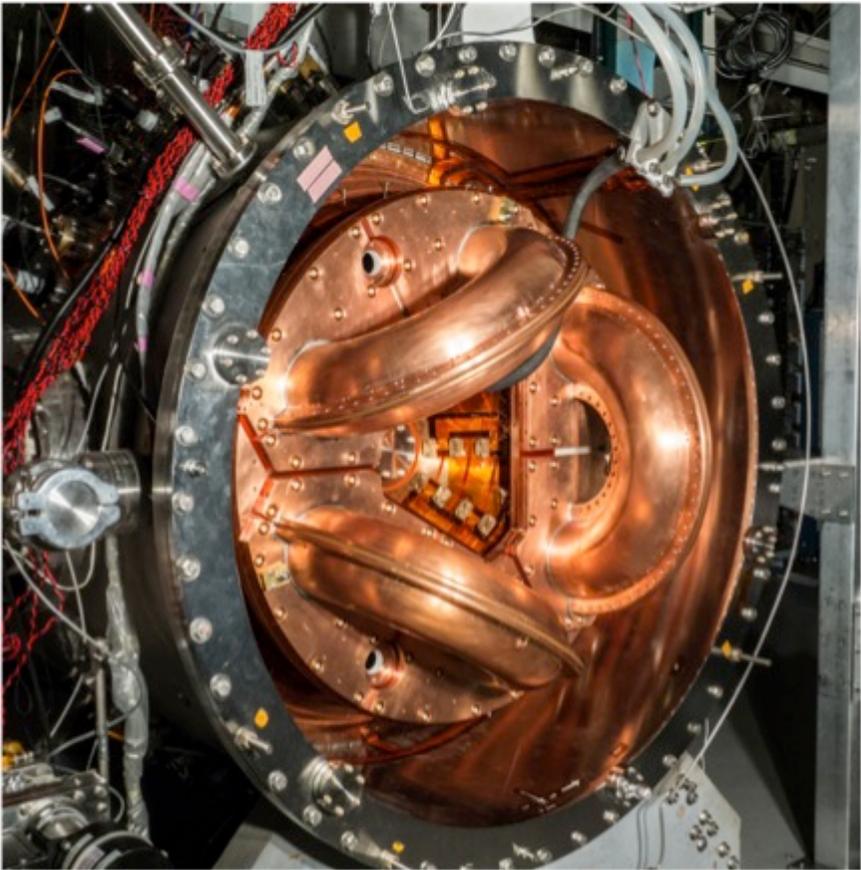
While important international cooperation is currently occurring under the auspices of the ITER project, and work on the project will make significant contributions to many aspects of fusion engineering design, ITER and its follow-on DEMO are not designed to yield a power-producing reactor for several decades - 2033. Therefore, a crash program in the spirit of Project Sherwood and on the scale of the Apollo Program must be launched immediately in the United States, closely coordinated with an acceleration of efforts around the globe, with the goal of bringing fusion online within 10-15 years. This will take a full, long-term (not year to year) commitment from all nations involved. In the U.S., this will mean immediately reassembling the best minds of the fusion program, many of whom are retired, semi-retired, or have been forced to find work in other industries, to come together on the effort.

As proven by the tremendous progress made in the U.S. fusion program when it had full support, there is no technical or scientific reason that an accelerated program cannot achieve fusion in the immediate years ahead; it is a matter of political will.

We must reverse this paradigm!

The time has come for mankind to free itself from the dominance of the Satanic system, and its genocidal policy of zero growth. We can no longer tolerate the fact that two-thirds of humanity lives in conditions of poverty! Scientific discovery and its implementation express that which distinguishes man from beast, and allow an immortal contribution of the present generation to the future. The suppression of fusion must end!

UW fusion reactor HIT-SI3 clean power concept is cheaper than coal



The UW's current fusion experiment, HIT-SI3. It is about one-tenth the size and five times the output of the power-producing dynamak concept.

Fusion energy – zero greenhouse gas emissions, no long-lived radioactive waste, a nearly unlimited fuel supply.

The UW's current fusion experiment, HIT-SI3. It is about one-tenth the size and five times the power output of the power-producing dynamak concept.

Perhaps the biggest roadblock to adopting fusion energy is that the economics haven't penciled out. Fusion power designs aren't cheap enough to outperform systems that use fossil fuels such as coal and natural gas - UW changes that!!

University of Washington engineers hope to change that. They have designed a concept for a fusion reactor that, when scaled up to the size of a large electrical power plant, would outperform economically and with clean power costs for a new coal-fired plant with similar electrical output.

The team published its reactor design and cost-analysis findings last spring and will present results Oct. 17 at the International Atomic Energy Agency's Fusion Energy Conference in St. Petersburg, Russia.

“Right now, this design has the greatest potential of producing economical fusion power of any current concept,” said Thomas Jarboe, a UW professor of aeronautics and astronautics and an adjunct professor in physics.

The UW's reactor, called the dynamak, started as a class project taught by Jarboe two years ago. After the class ended, Jarboe and doctoral student Derek Sutherland – who previously worked on a reactor design at the Massachusetts Institute of Technology – continued to develop and refine the concept.

The design builds on existing technology and creates a magnetic field within a closed space to hold plasma in place long enough for fusion to occur, allowing the hot plasma to

react and burn. The reactor itself would be largely self-sustaining, meaning it would continuously heat the plasma to maintain thermonuclear conditions. Heat generated from the reactor would heat up a coolant that is used to spin a turbine and generate electricity, similar to how a typical power reactor works.

“This is a much more elegant solution because the medium in which you generate fusion is the medium in which you’re also driving all the current required to confine it,” Sutherland said.

There are several ways to create a magnetic field, which is crucial to keeping a fusion reactor going. The UW’s design is known as a spheromak, meaning it generates the majority of magnetic fields by driving electrical currents into the plasma itself. This reduces the amount of required materials and actually allows researchers to shrink the overall size of the reactor.

Other designs, such as the experimental fusion reactor project that’s currently being built in France – called Iter – have to be much larger than the UW’s because they rely on superconducting coils that circle around the outside of the device to provide a similar magnetic field. When compared with the fusion reactor concept in France, the UW’s is much less expensive – roughly one-tenth the cost of Iter – while producing five times the amount of energy.

The UW researchers factored the cost of building a fusion reactor power plant using their design and compared that with building a coal power plant. They used a metric called “overnight capital costs,” which includes all costs, particularly startup infrastructure fees. A fusion power plant producing 1 gigawatt (1 billion watts) of power would cost \$2.7 billion, while a coal plant of the same output would cost \$2.8 billion, according to their analysis.

“If we do invest in this type of fusion, we could be rewarded because the commercial reactor unit already looks economical,” Sutherland said. “It’s very exciting.”

Right now, the UW's concept is about one-tenth the size and power output of a final product, which is still years away. The researchers have successfully tested the prototype's ability to sustain a plasma efficiently, and as they further develop and expand the size of the device they can ramp up to higher-temperature plasma and get significant fusion power output.

The team has filed patents on the reactor concept with the UW's Center for Commercialization and plans to continue developing and scaling up its prototypes.

Other members of the UW design team include Kyle Morgan of physics; Eric Lavine, Michal Hughes, George Marklin, Chris Hansen, Brian Victor, Michael Pfaff, and Aaron Hossack of aeronautics and astronautics; Brian Nelson of electrical engineering; and, Yu Kamikawa and Phillip Andrist formerly of the UW.

The research was funded by the U.S. Department of Energy.

Feds cut funding for Fusion - Cut in federal funding for MIT ARC fusion reactor which takes a page from Tony Stark

The Suppression of Fusion Power Generation by the Oligarchic Satanic, "Principle of Poverty"

Fusion reactors, like the one used by Marvel's 'Iron Man', would provide a source of clean, sustainable energy for the world

MIT's C-Mod tokamak reactor is one of the three major fusion research facilities in the U.S., along with DIII-D at General Atomics and the National Spherical Torus Experiment Upgrade (NSTX-U) at the Princeton Plasma Physics Laboratory.

MIT C-Mod Fusion Reactor
IPP, Wolfgang Filser

A researcher works inside of the Wendelstein 7-X (W7-X) an experimental nuclear fusion reactor built in Greifswald,

Germany, by the Max-Planck-Institut für Plasmaphysik (IPP). The reactor, completed in October 2015, is the largest to date.

Throwing a wrench into its efforts, MIT learned earlier this year that funding for its fusion reactor under the Department of Energy (DOE) is coming to an end. The decision to shut down Alcator C-Mod was driven by budget constraints, according to Edmund Synakowski, associate director of science for Fusion Energy Sciences (FES) at the DOE.

In the current budget, Congress has provided \$18 million for MIT's C-Mod, which will support at least five weeks of operations in its final year and cover the costs associated with the shutdown of the facility, Synakowski said in an email reply to Computerworld. (Researchers hope to find other funding sources to make up for the loss.)

The PSFC has about 50 Ph.D students working to develop fusion energy. Past students have left MIT to start their own companies or take develop academic projects outside of MIT.

Making sure that scientists and students at MIT can transition into collaborations at other DOE-funded fusion energy research facilities in the U.S. -- especially the two primary facilities: DIII-D at General Atomics in San Diego, and NSTX-U at Princeton Plasma Physics Laboratory -- has been "one of the major concerns," Synakowski said.

Over the past fiscal year, FES worked with MIT to establish a new five-year cooperative agreement, beginning on Sept. 1, 2015, to enable its scientists to transition to FES-funded collaborations.

Whyte, however, believes the promise of fusion energy is too important for research to wind down.

"Fusion is too important to have only one pathway to it," Whyte said. "My motto is smaller and sooner. If we can [create] the technology that allows us to access smaller devices and build a variety of them..., then this allows us to get to a

place where we've got more options on the table to develop fusion on a faster timescale."

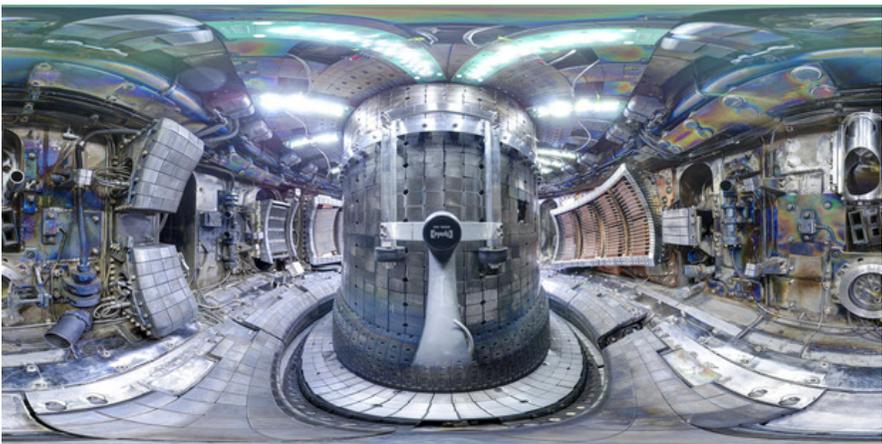
And, Whyte said, the scientific basis for small fusion reactors has been established at MIT.

"We did that despite the fact that we have the smallest of the major experiments around the world. We actually have the record for achieving pressure of this plasma. Pressure is one of the fundamental bars you have to get over," Whyte said. "We're very excited about this."

MIT has been developing a small fusion reactor prototype, three of which could power the City of Boston if they were fully built. For the past 20 years, MIT's Plasma Science and Fusion Center (PSFC) has been experimenting with nuclear fusion through the world's smallest tokamak-type (doughnut-shaped) nuclear fusion device -- the Alcator C-Mod.

The goal? To produce the world's smallest fusion reactor -- one that crushes a doughnut-shaped fusion reaction into a 3.3 meter radius -- three of which could power a city the size of Boston.

And MIT researchers are getting close to their goal, despite a recent cut in federal funding that could slow their progress.



The lessons already learned from MIT's smaller Alcator C-Mod fusion device have enabled researchers, including MIT Ph.D candidate Brandon Sorbom and PSFC Director Dennis Whyte, to develop the conceptual ARC (affordable, robust, compact) reactor.

"We wanted to produce something that could produce power, but be as small as possible," Sorbom said.

A working ARC fusion reactor would use 50 megawatts (MW) of power to produce 500MW of fusion power, 200MW of which could be delivered to the grid. That's enough to provide 200,000 homes with electricity.

A look inside MIT's C-Mod, which is only 0.68 meters in radius -- the smallest fusion reactor with the strongest magnetic field in the world.

While three other fusion devices roughly the same size as the ARC have been built over the past 35 years, they didn't produce anywhere near its power. What sets MIT's reactor apart is its superconductor technology, which would enable it to create 50 times the power it actually draws. (MIT's PSFC last year published a paper on the prototype ARC reactor in the peer reviewed journal ScienceDirect.)

The ARC reactor's powerful magnets are modular, meaning they can be easily removed and the central vacuum vessel in which the fusion reaction occurs can be replaced quickly; besides allowing upgrades, a removable vessel means a single device could be used to test many vacuum vessel designs.

Fusion reactors work by super heating hydrogen gas in a vacuum, the fusing of hydrogen atoms form helium. Just as with splitting atoms in today's fission nuclear reactors, fusion releases energy. The challenge with fusion has been confining the plasma (electrically charged gas) while heating it with microwaves to temperatures hotter than the Sun.

Sustainable energy

The result of successfully building an ARC reactor would be a plentiful source of clean and reliable power, because the needed fuel -- hydrogen isotopes -- is in unlimited supply on Earth.

"What we've done is establish the scientific basis...for, in fact, showing there's a viable pathway forward in the science of the containment of this plasma to make net fusion energy -- eventually," Whyte said.

Fusion research today is at the threshold of exploring "burning plasma," through which the heat from the fusion reaction is confined within the plasma efficiently enough for the reaction to be sustained for long periods of time.

A look at the exterior of MIT's C-Mod nuclear fusion device. The C-Mod project has paved the way for a conceptual ARC reactor.

Normally, gas such as hydrogen is made up of neutral molecules bouncing around. When you superheat a gas, however, the electrons separate from the nuclei creating a soup of charged particles rattling around at high speeds. A magnetic field can then press those charged particles into a condensed shape, forcing them to fused together.

The 40-year conundrum of fusion power is that no one has been able to create a fusion reactor that puts out more power than is required to operate it. In other words, more power is required to keep the plasma hot and generating fusion power than the fusion power it produces.

Europe's working tokamak reactor named JET, holds the world's record for power creation; it generates 16MW of fusion power but requires 24MW of electricity to operate.

MIT's researchers, however, believe they have the answer to the net power problem and it'll be available in a relatively tiny package compared to today's nuclear fission power plants. By

making the reactor smaller, it also makes it less expensive to build. Additionally, the ARC would be modular, allowing its many parts to be removed for repairs to upgrades, something not previously achieved.

What sets MIT's fusion device apart

What MIT alone has done is create the world's strongest magnetic containment field for a reactor its size. The higher the magnetic field, the greater the fusion reaction and the greater the power produced.

"We're highly confident that we will be able to show this medium can make more fusion power than it takes to keep it hot," Whyte said.

MIT arc reactor MIT Plasma Science and Fusion Center
A cutaway view of the proposed ARC reactor. Thanks to powerful new magnet technology, the much smaller, less-expensive ARC reactor would deliver the same power output as a much larger reactor.

Fusion reactors would have several advantages over today's fission nuclear reactors. For one, fusion reactors would produce little radioactive waste. Fusion reactors produce what are called "activation products" with the fusion neutrons.

The small amount of radioactive isotopes produced are short lived, with a half life lasting tens of years vs. thousands of years from fission waste products, Sorbom said.

The reactors would also use less energy to operate than fission reactors.

While MIT's current Alcator C-Mod produces no electricity, it demonstrates the effects of a magnetic containment field on super-heated plasma, and by hot we're talking about 100 million degrees Fahrenheit. By comparison, our Sun is a chilly 27 million degrees Fahrenheit.

Far from being dangerous, the 100-million-degree plasma instantly cools and resumes a gaseous state when it touches the inner sides of the reactor. That's why a powerful magnetic containment field is needed.

Just like a fission nuclear reactor, a fusion reactor would essentially be a steam engine. The heat from the controlled fusion reaction is used to turn a steam turbine that, in turn, drives electrical generators.

MIT's current C-Mod fusion device uses plentiful deuterium as its plasma fuel. Deuterium is a hydrogen isotope that is not radioactive and can be extracted from seawater.

In order to create a conceptual ARC reactor, however, a second hydrogen isotope is needed: tritium. That's because the rate at which deuterium-deuterium isotopes fuse is about 200 times less than the rate at which deuterium-tritium isotopes fuse.

Tritium, while radioactive, only has a half-life of about 10 years. Although tritium does not occur naturally, it can be created by bombarding lithium with neutrons. As a result, it can be easily produced as a sustainable source of fuel.

With fusion reactors, smaller is better

While MIT's reactor might not fit conveniently into Tony Stark's chest (that is a movie after all), it would be the smallest fusion reactor with the most powerful magnetic containment chamber on earth. It would produce the power of eight Teslas or about two MRI machines.

By comparison, in southern France, seven nations (including the U.S.) have collaborated to build the world's largest fusion reactor, the International Thermonuclear Experimental Reactor (ITER) Tokamak. The ITER fusion chamber has a fusion radius of 6.5 meters and its superconducting magnets would produce 11.8 Teslas of force.

However, the ITER reactor is about twice the size of ARC and weighs 3,400 tons -- 16 times as heavy as any previously manufactured fusion vessel. The D-shaped reactor will be between 11 meters and 17 meters in size and have a tokamak plasma radius of 6.2 meters, almost twice the ARC's 3.3-meter-radius.

The concept for the ITER project began in 1985, and construction began in 2013. It has an estimated price tag of between \$14 billion and \$20 billion. Whyte, however, believes ITER will end up being vastly more expensive, \$40 billion to \$50 billion, based on "the fact that the U.S. contribution" is \$4 billion to \$5 billion, "and we are 9% partners."

Additionally, ITER's timetable for completion is 2020, with full deuterium-tritium fusion experiments starting in 2027.

When completed, ITER is expected to be the first fusion reactor to generate net power, but that power will not produce electricity; it will simply prepare the way for a reactor that can.

MIT's ARC reactor is projected to cost \$4 billion to \$5 billion dollars and could be completed in a four to five years, Sorbom said.

The reason ARC could be completed sooner and at one-tenth the cost of ITER is due to its size and the use of the new high-field superconductors that operate at higher temperatures than typical superconductors.

Typically, fusion reactors use low-temperature superconductors as magnetic coils. The coils must be cooled to about 4 degrees Kelvin, or minus 452 degrees Fahrenheit, to function. MIT's tokamak fusion device uses a "high-temperature" rare-earth barium copper oxide (REBCO) superconducting tape for its magnetic coils, which is far less expensive and efficient. Of course, "high temperature" is relative: the REBCO coils operate at 100 degrees Kelvin, or about minus 280 degrees Fahrenheit, but that's warm enough to use abundant liquid nitrogen as a cooling agent.

MIT fusion reactor



In his left hand, Professor Brandon Sorbom holds a rare-earth barium copper oxide (REBCO) superconducting tape used in

the fusion reactor's magnetic coils. In his right hand is a typical copper electrical cable. The use of the new superconducting tape lowers costs and enables MIT to use plentiful liquid nitrogen as a cooling agent.

"The enabling technology to be able to shrink the fusion device size is this new superconducting technology," Sorbom said. "While the [REBCO] superconductors have been around since the late 1980s in labs, in the last five years or so companies have been commercializing this stuff into tapes for large scale projects like this."

In addition to size and cost, REBCO tape is also able to increase fusion power 10-fold compared to standard superconducting technology.

Before MIT's ARC can be built, however, researchers must first prove they can sustain a fusion reaction. Currently, MIT's C-Mod reactor runs only a few seconds each time it's fired up. In fact, it requires so much power, that MIT must use a buffer transformer in order store enough electricity to run it without browning out the city of Cambridge. And, with a plasma radius of just 0.68 meter, C-Mod has is far smaller than even the ARC reactor would

So before it builds the ARC reactor, MIT's next fusion device -- the Advanced Divertor and RF tokamak eXperiment (ADX) -- will test various means to effectively handle the Sun-like temperatures without degrading the plasma performance.

After achieving sustainable performance, the ARC will determine whether net power generation is possible. The last hurdle before fusion reactors can supply power to the grid is transferring the heat to a generator.

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Cover image

ARC: A compact, high-field, fusion nuclear science facility and demonstration power plant with demountable magnets

B.N. Sorbom, , J. Ball, T.R. Palmer, F.J. Mangiarotti, J.M. Sierchio, P. Bonoli, C. Kasten, D.A. Sutherland, H.S. Barnard, C.B. Haakonsen, J. Goh, C. Sung, D.G. Whyte

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Highlights

•

ARC reactor designed to have 500 MW fusion power at 3.3 m major radius.

•

Compact, simplified design allowed by high magnetic fields and jointed magnets.

•

ARC has innovative plasma physics solutions such as inboardside RF launch.

•

High temperature superconductors allow high magnetic fields and jointed magnets.

•

Liquid immersion blanket and jointed magnets greatly simplify tokamak reactor design.

Abstract

The affordable, robust, compact (ARC) reactor is the product of a conceptual design study aimed at reducing the size, cost, and complexity of a combined fusion nuclear science facility (FNSF) and demonstration fusion Pilot power plant. ARC is a ~200–250 MWe tokamak reactor with a major radius of 3.3 m, a minor radius of 1.1 m, and an on-axis magnetic field of

9.2 T. ARC has rare earth barium copper oxide (REBCO) superconducting toroidal field coils, which have joints to enable disassembly. This allows the vacuum vessel to be replaced quickly, mitigating first wall survivability concerns, and permits a single device to test many vacuum vessel designs and divertor materials. The design point has a plasma fusion gain of $Q_p \sim 13.6$, yet is fully non-inductive, with a modest bootstrap fraction of only $\sim 63\%$. Thus ARC offers a high power gain with relatively large external control of the current profile. This highly attractive combination is enabled by the ~ 23 T peak field on coil achievable with newly available REBCO superconductor technology. External current drive is provided by two innovative inboard RF launchers using 25 MW of lower hybrid and 13.6 MW of ion cyclotron fast wave power. The resulting efficient current drive provides a robust, steady state core plasma far from disruptive limits. ARC uses an all-liquid blanket, consisting of low pressure, slowly flowing fluorine lithium beryllium (FLiBe) molten salt. The liquid blanket is low-risk technology and provides effective neutron moderation and shielding, excellent heat removal, and a tritium breeding ratio = 1.1. The large temperature range over which FLiBe is liquid permits an output blanket temperature of 900 K, single phase fluid cooling, and a high efficiency helium Brayton cycle, which allows for net electricity generation when operating ARC as a Pilot power plant.

Graphical abstract

Image for unlabelled figure

Keywords

Compact pilot reactor; High magnetic field; Fusion nuclear science facility; Liquid immersion blanket; Superconducting joints; Tokamak; High-field launch

China Just Became the World Leader in Nuclear Fusion Research - sustains a fusion reaction for 102 seconds

**With China's new record of 102
seconds, this represents a massive step
forward in nuclear fusion**

By Justin Horner - February 8, 2016 14598 4
Inside China EAST Reactor

China announced last week a major breakthrough in the realm of nuclear fusion research. The Chinese Experimental Advanced Superconducting Tokamak (EAST), was able to heat hydrogen gas to a temperature of near 50 million degrees Celsius for an unprecedented 102 seconds. While this is nowhere near the hottest temperature that has ever been achieved in nuclear fusion research, that distinction belongs to the Large Hadron Collider which reached 4 trillion degrees Celsius, it is the longest amount of time one has been maintained.

Germany was the previous world leader in nuclear fusion research when it was able to heat hydrogen gas to 80 million degrees Celsius for a quarter of a second. This was considered

a huge breakthrough in the amount of time we could maintain these levels of temperatures.

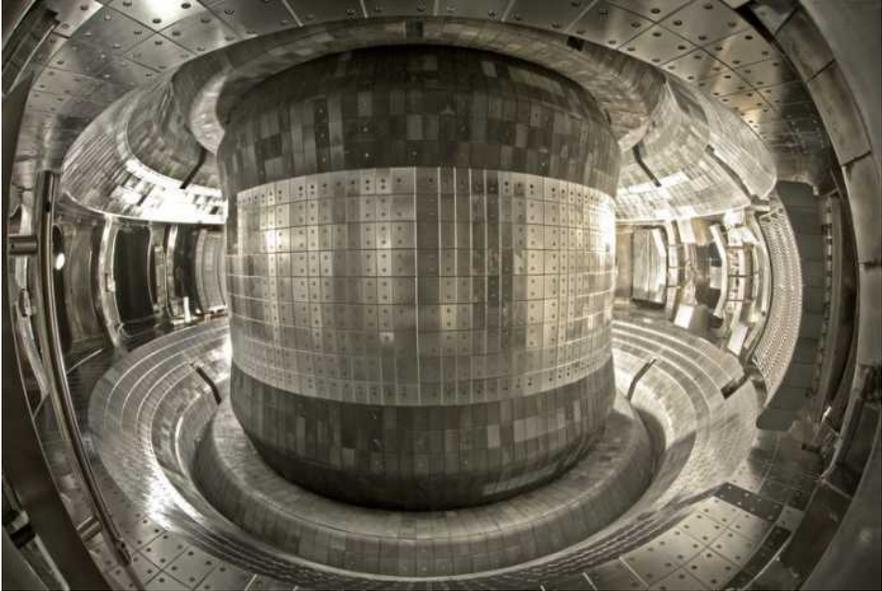


Image: Institute of Plasma Physics Chinese Academy of Science

With China's new record of 102 seconds, this represents a massive step forward in nuclear fusion, with the goal being a length of time long enough for us to effectively harness the energy produced from the reaction.

The goal of nuclear fusion research is to produce clean, renewable energy. It seeks to do this by replicating the same conditions that power the sun. Super heated hydrogen atoms, contained by the sun's massive gravitational pull, bounce around inside the sun until they collide into one another. As the two hydrogen atoms attach to one another they form a helium atom. The helium atom has more mass than either of the individual atoms, but less mass than the two combined. This excess mass is released as huge amounts of energy.

Nuclear fusion researchers are experimenting with different methods of keeping the atoms contained in a vacuum to maintain the necessary temperature. China's EAST reactor does this by the use of a magnetic field in a donut-shape that has the hydrogen circling around inside it.

The technologies they have in place there could very well lead to harnessable energy from nuclear fusion.

With the International Thermonuclear Experimental Reactor (ITER) currently being constructed in France, perhaps the insights gained at the EAST could give us the hints necessary for the ITER to finally "crack the code" on nuclear fusion. With this development from China, we are one step further down the road to clean, renewable energy

Isaac Newton was a Peerage Secret Agent who became Spymaster of England

by Miles Mathis

<http://milesmathis.com/updates.html>

First published May 2, 2020

The first part here is genealogy, but don't leave yet. If you can't abide genealogy, skip ahead, since there is a lot beyond that. I hit the genealogy for a reason: we need to know where Newton came from to understand the rest.

I used Tim Dowling's free pages at Geneanet for this one. The most important line in Newton's ancestry is the Constable line, starting with his 4g-grandmother, d. 1512. [Yes, this links us to the painter Constable.*] Her maternal grandmother was a le Despenser, which links us to the Earls of Fleming and Earls de Warenne. Following them back we come to King David of Scotland, 1084, continuing back to Malcolm of Scotland, and finally Finn in 249AD. But in another line we can go back even further, to Mogh Lamha of Ireland, 110AD. Taking Newton's lines directly back, we also hit Ethelred of England, Princess Elgiva of England, Ranulf of Poitiers, and Louis the Stammerer, King 843-879. That puts us in the French royal line, where we soon hit Charles the Bald, Judith Princess of Bavaria, and Charlemagne. Yes, Charlemagne is in the direct line of Newton. We also hit Cerdic of Wessex, who Tim Dowling takes directly back to Odin, in 215AD. Through him we go forward to Gewar King of Norway 221AD, Skjold

King of Denmark 237AD, St. Begga, Ostrogotha des Gepidae 500AD, Clotilde von Sachsen 581AD, Saint Arnulf, Adalbert of Italy 947, Alfonso de Castile 1155, Archambaud de Bourbon 1189, King Louis Capet 1120, and Gilbert Baron de Lancaster 1089. Note the Sachsen, way back in the 6th century. That is a variation of Saxe and Sachs, as in Goldman Sachs.

We also hit de Bruce 1190, de Lindsay 1172, Keith, and Lord Robert Stewart 1378. He links us to Campbell, Stuart, Montgomery, and Erskine, the last taking us directly to James of Scotland 1512. Other cousins of Newton in these lines include Douglas, Gordon, Grant, Mackenzie, Kennedy, Murray, Graham, Basset, Montagu, Grey, Ferrers, Beauchamp, Constable, Wentworth, Howard, Hussey, and Hervey.

Newton is also a FitzWilliam through his other great-grandmother, linking us to all the same families once again.

Through the Gresley line, Newton is related to the Stanleys, Lathoms, Gerards, Pilkingtons, Montgomeries, and Savages. Through these Stanleys, Newton was a contemporary cousin of the Stanleys of Hartford, CT, related to the Scotts and Strongs. Through the Hilyards, Newton is a Hastings, linking us to the de la Roches (think Rockefeller) and Beauclercs, including King Henry Beauclerc 1102 and Henry II Plantagenet. Henry II is a step-grandfather of Newton, several centuries removed, through Ida of Toeni. Newton is also a cousin of the Breretons, Harcourts, Russells, and Bigods.

Through the Tyrwhitts, Newton is a cousin of the Clintons, de Burghs, and Kayes. Since Newton is also a Blythe through his grandmother Margery, we have a curious possible link to Bill Clinton. Remember Bill's alleged real name: William Blythe III.

In Newton's paternal line, we hit Daubeneys, Stourtons, Paynes, Vernons, Berkeleys, FitzGerald, Beaumonts, Grosvenors, D'Acres, Bassets, and FitzRois. We even have women named Lettice, telling us who we are dealing with. The

Stourtons are one link to Geneanet sitemaster Tim Dowling, since they are in his direct line. Tim Dowling's 16g-grandmother Alice Stourton is Isaac Newton's 5g-grandmother, making them 6th cousins. The FitzRoys take us directly to King John and his wife Adela Plantagenet. Through her, we hit the Warennes again, as well as the Douglasses, linking us to all the same people one more time. So Newton's paternal and maternal lines are linked going way back. Eleanor of Aquitaine takes us back to Prince Robert of France, who links us not only to the Capets, but to Charlemagne again. So Newton is descended from Charlemagne in both his paternal and maternal lines.

So we have seen that Newton—whose ancestry Wikipedia and the other history sites completely ignore—is actually descended from kings of England, France, Scotland, Ireland, Italy, Spain, and Bavaria. He is a close cousin to all the top names in the peerage, including the Stuarts, Murrays, Stanleys, Kennedys, Grahams, Lindsays, and Scotts. He is also directly descended from a god: Odin. That always helps.

So if you thought Newton got where he did on genius alone. . . you would be wrong.

I have James Gleick's biography of Newton on my shelves, so I checked it for more information. Unfortunately it is a complete wash. Gleick tells us Newton couldn't trace his ancestry past his grandfather, which you see is a lie. He admits Newton was the Lord of a Manor, and his mother also the daughter of a gentleman, but we get no more than that.

Finally, if we check thepeerage.com, we find Sir Isaac Newton listed, sure enough. So it is admitted by some that he was a peer. The first thing we learn is that his famous birthplace in Woolsthorpe is not actually his birthplace. That manor house, though large, was actually next door to an even larger companion that was pulled down in 1798, called the Dower house. Both were owned by the Newtons, with Newton's grandfather living in one and his grandmother living in the other. More to the point, Lundy scrubs Newton's paternal

grandmother and ends the line at his grandfather. According to Dowling, she was Ann Wood, but no other information is forthcoming on her. Dowling does take the Newtons back five more generations, to a Thomas of Somersetshire, b. 1441. Does Lundy at thepeerage link us to any peers? No, since in the maternal line we find a similar scrubbing. The Ayscough and Blythe lines end immediately. So Lundy admits Newton was a peer but won't tell us anything else. Pretty strange. To learn more about the Newtons, we have to go to other pages. The Newtons became baronets of the Wood in 1845, but the 1st Baronet is scrubbed after his grandfather. Another became baronet in 1924, when he was Lord Mayor of London. He is scrubbed after his father. Another Newton, Alfred, was Lord Mayor of London 25 years earlier, and he was also made a baronet. Another, Sir Robert, became baronet of London in 1660, and that looks promising. . . except that we are given no other information but the he married a Longston.

Wiki tells us his daughter married a Howard, which connects us to Isaac Newton, who was also a Howard (though way back). John Newton became Baronet of Barrs Court in 1661, and Wiki gives the first three baronets as John. But thepeerage scrubs the 1st Baronet, giving the father of the 2nd as Thomas, not a baronet. That's strange. Lundy may be trying to hide the fact that Isaac Newton is a cousin of these Baronets of Barrs Court, but Wikipedia admits it. When Newton was knighted by Queen Anne in 1705, he submitted paperwork showing he was a near cousin of these baronets, and modern genealogists have confirmed it. In fact, the chief mourner at Newton's funeral in 1727 was the 4th Baronet, Sir Michael Newton.

And there was yet another Newton baronet in the 1600s, Sir Adam Newton, raised in 1620. He was Dean of Durham College and lived at Charlton House, London. Charlton is a huge house built by James I and then given immediately to Newton, who was tutor to his son Prince Henry. The house was built for Henry, but he died within the year and so James passed the house on to Newton. Newton was also Receiver-General under James (a sort of banker, accepting payments on

behalf of the government). He was basically the King's Treasurer, explaining his great wealth. Wikipedia also admits this Newton was "associated with the Stuart royal family". What does that mean? I take it to mean he was related to them. We saw above that the Newtons were indeed related to the Stuarts, though with Isaac Newton's scrubbed genealogy we had to go back many generations to prove it. Dowling scrubbed Newton's lines so well that the best way to link Newton to the Stuarts is through Dowling himself. Dowling is too vain to scrub that link. But since we know Dowling is a first cousin to the Stuarts and a sixth cousin to Newton, the math isn't hard. This Adam Newton was probably a step or two closer to the Stuarts than Isaac, explaining his preference. But as I am showing you, Newton's preference is explained in the same way. Seven steps away from the Stuart royal line is not much.

Before we move on, there is another story about this Sir Adam Newton. He appears to have been in Intelligence from early in life, since he was assigned to France as a spy in his 20s. He pretended to be a priest and taught for a time at a college in Poitou. While there he "taught" the Huguenot theologian Andre Rivet. Since the Huguenots are (often) Jewish fronts, you begin to see the picture. Rivet was also probably a fake. He was chaplain of Henry, Duke of La Tremoille, so it is informative to find Rivet claiming to be a Huguenot. The Dukes were heavily involved in the religious wars of that time, though they weren't what we have been sold. Henry's father Claude had converted to Huguenot just before the wars, which looks mighty suspicious. It is almost as suspicious as the Queen of Navarre's conversion to Calvinism in 1560. All these people were crypto-Jewish, having no real interest in either Catholicism or Calvinism, so when you see them embracing one or the other, you should dig deeper. Remember, the religious wars started in earnest when the Queen of Navarre's son became Henry IV, King of France, and for some reason decided to push the religion of his mother upon the entire country. No one ever asks why he would do such a fool thing, but given what we now know, we can make an educated guess: to foment wars on purpose, for profit. That is what these

people do, you know. The tocsin of these wars was the St. Bartholomew's Day massacre, now admitted to have been instigated by then Queen Mother Catherine de' Medicis. . . who I have shown was a crypto-Jew. Again, we get the usual numerology markers, since the first paragraph on the Wiki page for the massacre has the date August 18, 8/18, aces and eights, Chai. That was the wedding day of the King's sister to

Henry III of Navarre (later Henry IV of France). The massacre took place a couple of days later, on the feast day of St. Bartholomew. Bartholomew was allegedly martyred for converting the King of Armenia to Christianity. . . though that story is also fiction. But it is fiction for the same basic reason: to manufacture schisms and thereby religious wars. These wars generate fantastic profit while hiding the real battles for supremacy among the top Phoenician families.

We are told this marriage to Henry of Navarre was a big problem, but if the royal family had really been against it they would have simply forbidden it. Princess Margaret of Valois didn't have to marry Henry, and since it happened we may assume the Medicis wanted it to happen. The Medicis later married Henry to one of their own, Marie de' Medicis, actually going so far as to annul Henry's previous marriage to the Princess. So they never had any problem with Henry. He was obviously their tool all along, which means his mother was their tool as well. Which means the Huguenot thing was manufactured from the ground up by the Medicis, both as opposition control and as a wedge.

Anyway, the massacre of 1572—to the extent it actually happened—was not about Catholic v. Protestant. It was about manufacturing division, and even more about stealing the assets of prominent aristocrats targeted by the Medicis. Coligny was the main target, and he was killed (or relocated) not for being Protestant but for being anti-Medici. The Medicis used the event to not only get rid of their opposition, but to steal the wealth of any aristocrat who had resisted them. The Medicis, who wrote all this history, have tried to

point the finger at the Guises, but the Medicis were playing the Guises all along. This wasn't a war of Guise against Bourbon, it was a war of the Medicis against both, but as usual running the play from behind the scenes like spiders strumming a web. But that still deserves a paper of its own. For now, I simply remind you that the Huguenots were like the Marxists of their time, being either dupes or fronts for the fascists. As now, the real battle wasn't between Catholics and Protestants, but between various factions of the Phoenician Navy. These were very old Jewish lines battling for control of countries and their treasuries. Seeing Adam Newton involved in this as an accomplice of the Dukes of la Tremoille is informative, since it allows us to see how the Stuarts had their hand in the religious wars in France. Adam Newton was an agent of the Stuarts, who look to be allies of the Tremoilles, who may have been cloaked enemies of the Medicis. It is difficult to unwind, but an important clue is that the Tremoilles, including this Duke, claimed the title of King of Jerusalem through the line of Cyprus. Being descendants of Frederick IV of Naples, they claimed the title through a second line, via Brienne and John Casimir of Poland. So we may be witnessing a submerged battle between the Medicis and Jagiellons, going back many centuries. In other words, northern and southern lines of the Phoenicians battling for supremacy in France, with Spanish and English lines also taking sides. The Medicis have no overt claim to the King of Jerusalem, that I know of, but they may have married into the Bourbon line, using Henry, specifically to get it. The Bourbons did claim it, and still do. The present King of Spain, Felipe VI, calls himself King of Jerusalem. So it appears the Medicis captured the Bourbon line at this time to lay claim to the King of Jerusalem title, with the Huguenot wars as cover. This is confirmed by the fact that historians are still hiding this almost 400 years later. The Medicis are not mentioned once on the page for King of Jerusalem.

But let's move on. We are told Newton entered Trinity College, Cambridge, as a sizar, that is to say a scholarship student not from the gentleman class, but I find that pretty difficult to believe. Possibly this was due to the death of his father, but I

have found a lot of evidence Newton wasn't the son of a tradesman or yeoman—as most of the other sizarers allegedly were. More important is that he was at Trinity, always a spook college. Unlike with most others, I am not going to argue Newton was only a spook. No, in addition to being a real scientist, he was also a spook.

One of the first spooky things we find is that we have no real proof Newton graduated from Trinity in

January, 1665. The *ordo senioritis* is normally published, which tells us the candidates for the year in each school and their order of graduation; but the relevant pages in the Grace Book for that year are mysteriously missing. It is also known that Cambridge was dismissed in 1665 and 1666 due to the Great Plague, so it is curious to be told Newton graduated that year. Also strange is that at Wikipedia, we are told

Newton must have must have left college before August 1665 [according to whom?], as his name does not appear in the list of those who received extra commons on that occasion, and he tells us himself in the extract from his commonplace book already quoted that he was "forced from Cambridge by the plague" in the summer of that year.

But if he graduated in January, 1665, and didn't receive a fellowship until October, 1667, then what was he doing at Cambridge in summer of 1665? The fact that he was there in summer, 1665, implies to me he didn't graduate in January. And if classes were dismissed during that summer, that implies he was dismissed before getting a degree. Regardless, it is strange to see Newton elected as a fellow immediately after obtaining a Bachelors. We are led (by omission) to believe Newton was a stellar student, but there is actually no evidence of that. Just the opposite. His bio admits he was a poor student up to that time; and even after his fellowship, he continued to do strange things. A few weeks after his election to fellow in October 1667, he left Cambridge and went to Lincolnshire, not returning for four months. This after having a forced vacation of over two years due to the plague. Just so

you know, fellows are normally expected to teach, so I don't understand how he was allowed to fly the coop for four months.

We are told he received his Masters in March of 1668, but at that point he had been back at Cambridge for only a couple of weeks. I will be told he worked on his Masters in private during the plague, which is certainly possible, but we are given no idea how that worked. Colleges don't normally award degrees for private study, since it makes the college system look superfluous.

Even the editors at Wikipedia are unimpressed by the history being sold here, since they have littered their own pages with "citation needed" and "according to whom?" These pages are very poorly written and sourced, which—considering their subject—is very surprising. Do you think there haven't been any books about Newton they can quote?

The strangeness continues, since in 1669 Newton wrote his paper *On Analysis by Infinite Series*. Neither Cambridge Press nor the Royal Society were impressed with it, rejecting it for publication [it wasn't published until 32 years later by William Jones], but for some reason it was promoted by John Collins, "mathematical intelligencer". Intelligencer can mean "someone who spreads news", but it can also mean intelligence agent or spy. At this distance in time, you would expect they would just call Collins a "private scientist" or something, since there is no need to create intrigue. But they conspicuously tell you Collins was an intelligencer, even italicizing it in case you missed it. I see this as a clue. And indeed, any study of Collins throws up the usual red flags. Although he was only a teenage bookseller's apprentice in 1642, he was hired by the Prince of Wales' clerk to do. . . what? We aren't told. He spent some time as a sailor working for the Venetians, our next red flag. Later he wrote some treatises on navigation, including the use of quadrants, for the East India Company. Somehow, he was elected to the Royal Society in 1667, less than two years before promoting Newton. This is strange because he had done nothing to merit such election at

that point. Nonetheless, within about two weeks, on November 11, 11/11, he had already presented a theorem to the Society by the Jesuit Jacques de Billy.

Anyway, we are told that Newton gave the paper to his department head Isaac Barrow, and Barrow gave it to Collins with no name on it. Only after Collins expressed interest did Barrow admit it was by Newton. This makes no sense: the cloak and dagger is unnecessary. We are led to believe this paper was Newton's springboard to take over Barrow's position as Lucasian professor at age 25, but again it makes no sense. Barrow himself was only 38, so why would he give up his chair to a 25-year-old Newton? And Newton couldn't just be given the chair by Barrow: he would have to be elected to it. Why would he be elected to this prestigious chair at age 25 based on a paper Cambridge had rejected for publication? As you are seeing, this entire history looks manufactured. It looks even more manufactured when you realize how many years Newton was Lucasian professor: 33. He was the second recipient of that honor, and Barrow, the first, had only occupied the chair for six years.

The position had been created in 1663 by politician Henry Lucas, MP. Lucas had been secretary to Henry Rich, the Earl Holland. Holland was of course the son of Robert Rich, Earl of Warwick, and Penelope Devereux, who we have seen before. These Riches were previously Reichs of Germany, crypto-Jewish bankers and thugs brought over to England by Henry VIII to help him loot the monasteries. So we find more red flags everywhere we look. The Lucasian professorship was officially established by Charles II on January 18, 1664. Yes, that is 1/18, aces and eights, Chai.

Isaac Barrow was also Jewish, of course, being the son of a linen draper. Meaning, his father was a wealthy and influential linen merchant, probably connected to the East India Company. Barrow's half-brother ended up in Barbados, which confirms this. Isaac Barrow went to Trinity College with the support of Sir Edward Walpole, father of Robert Walpole. Walpoles' father-in-law Edward Barkham was Lord Mayor of

London in 1621, and had previously been Master of the Worshipful Company of Leathersellers. In 1622 he became Master of the Worshipful Company of Drapers. So there is your connection between Barrow and the East India Company. Walpole's brother-in-law became the 1st Baronet Barkham, of Kings College, Cambridge.

These Barkhams were closely related to the Garrard baronets, and this links us back to Newton. Newton was a Gerard, and Gerard=Garrard. That tells us that Barrow and Newton were related. The Barrows also later become baronets (after 1784), but in the time of Newton they were marrying into the Knight and Pope families. Thepeerage.com scrubs the Barrows before that, but Geni tells us something interesting. Isaac Barrow's father came over to Virginia in 1654, again probably as part of the East India Company. He remained there the rest of his life. Isaac lived with his grandfather, who owned Spinney Abbey, Wales. This was a Benedictine monastery stolen in 1538 by Henry VIII and given to Sir Edward North in 1545. Oliver Cromwell's son Henry lived there at the time of our story, up to 1674. In the 1620s Spinney Abbey was owned by Sir Edward Peyton, 2nd Baronet. Barrow was there in the 1630s.

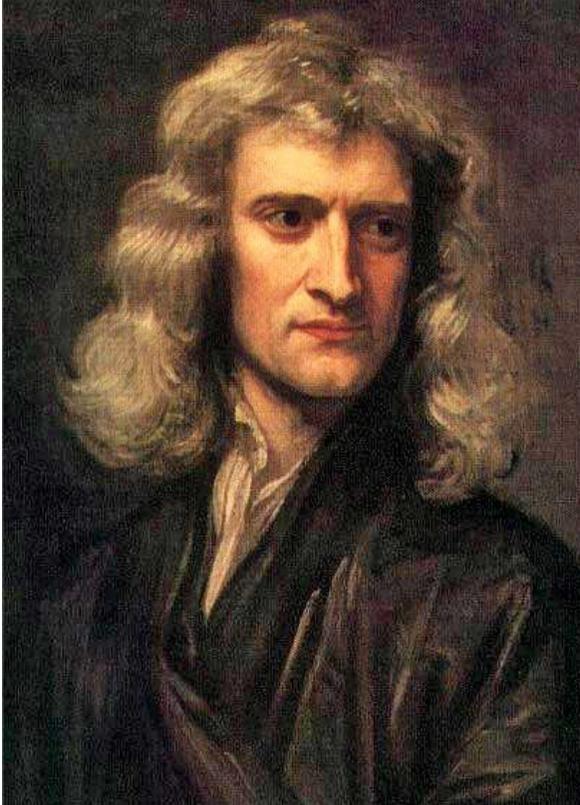
So how and why did this Abbey get passed around so much in the 1600s? Well, the clue is Peyton's grandmother, Elizabeth Rich, daughter of Richard Rich, 1st Baron of Rochford Hall and Leigh's Priory. He is the Rich who actually stole the monasteries for Henry VIII, later being the Lord Chancellor of Henry's son Edward VI. So Peyton got the Abbey because he was a Rich. And Barrow? How did he get it? He must have been a Rich as well.

Which of course explains why a Rich's secretary, Henry Lucas, created the Lucasian professorship. He created it just so he could give it to a Barrow, who was a relative. Barrow was then instructed to step aside for an even higher ranking relative—Isaac Newton. You see how this all begins to come together.

Just so you know, I am now shaking my head and saying outloud, "I never expected this!" I came into this expecting

only to do Newton's genealogy, but as usual this is digging itself into another rabbit's hole.

Here is what they want you to think Newton looked like:



They lead with that portrait in most places, including Wikipedia and Geneanet. But there is a big problem. The artist is given as Godfrey Kneller, but it isn't in his style. Compare it to his self-portrait from four years earlier.



I knew the portrait of Newton was a fake at first glance, since it not only doesn't match Kneller's style, it doesn't match the style of the time. Plus, it is garbage, and was obviously painted in the 20th century, after people forgot how to paint portraits. It is the work of a poor amateur, with the brushwork being exceedingly clumsy. I guess they want us to think Newton was blond, or maybe prematurely gray, but here is how he really looked young and old:



Dark hair, long nose, small mouth, heavy-lidded eyes. I see some resemblance to the Fiennes brothers in the first, especially Ralph. Not surprising, since they are related. We will see a Fiennes below.

Next, the historians admit no one came to Newton's lectures in the early years. So we are supposed to believe that this 26-year-old phenom, Lucasian professor, promoted by intelligencers and the East India Company, generated no interest from actual students? Something doesn't add up there. He either had atrocious body odor or the history has been finessed.

On January 11, 1672, he was elected to the Royal Society. Yes, that was 1/11. He was only 29, and was elected based on his reflecting telescope, which we are told he invented. But, as with others we have studied (see Ben Franklin and Buckminster Fuller), the history is again finessed. We are taught that Newton invented the reflecting telescope, but that isn't true. Niccolo Zucchi built the first reflecting telescope in 1616, 55 years earlier. It didn't work well, due to the reflecting material chosen, but the design was already in place. Mersenne designed a reflecting telescope in 1636 <https://books.google.com/books?id=PuN7l2A2uzQC&pg=PA4#v=onepage&q&f=false> based on the work of Descartes from 1634, *Traite du monde ou de la lumiere*, which set out the aspheric properties of the necessary paraboloid mirror. Wikipedia doesn't even mention this on Mersenne's page. In the 1660s, James Gregory, preceding Newton, updated Mersenne's designs in several major ways, and even made a serious attempt to build it. But his technicians were not up to the task. We are told Newton solved this problem with a 45-degree mirror reflecting the image to an eyepiece to the side, but he also borrowed that idea from Zucchi. So Newton didn't actually invent much of anything. He simply had access to better technicians. He used the plans of Descartes and Mersenne to update Zucchi's design, and found someone to build it. We are told Newton built it himself, but they admit that the telescope demonstrated at the Royal Academy was not the one Newton built. It was a "duplicate" of better quality, so we may assume Newton or his overseers hired professionals to "duplicate" it.

In defense, I will be told that Newton's theory of prism refraction allowed him to explain chromatic aberration, and to thereby invent the achromatic objective. But just the opposite is true. Newton thought that refraction and chromatic dispersion were explained by the same linear function, and he attacked anyone that claimed otherwise, actually preventing the solution to that problem for over half a century.

Newton also sat on the advances proposed by Cassegrain just a year later, pooh-pooing his hyperbolic secondary as unbuildable, while missing (or burying) the great telephoto advantages of the design. But in fact the Cassegrain design was much more important, and it is now used in optical and radio telescopes. For this reason, Newton's oversimplified prototype was actually a disaster in the early history of telescopy, impeding design and manufacture of Cassegrains for many years. Most people don't know that Newton's telescope—whether his lost original or the duplicate—was made with a spherical mirror, not a paraboloid. It was eight inches long. So it was almost as naive as Zucchi's old telescope.

As I was reading the page on Newton's youth at Wikipedia, I also noted that every communication from him seems to be dated with some variation of Chai. For instance, they quote from his letter of January 18, 1672, to the Royal Society. A few paragraphs later they quote from his November 18, 1676, to Oldenburg. Further down the page, we find Oldenburg reading a letter to the Royal Society on January 11, 1672. Didn't Newton or his pals ever write letters on days that weren't aces and eights?

None of this bodes well for our upcoming assessment of Newton's quarrels with Hooke, Leibniz, and others. We have already seen that Newton was promoted from the beginning by some very unscrupulous people, and finding the Riches and Walpoles at the back of this is the worst possible red flag. This bad feeling is confirmed by any study of Newton and Hooke. It is admitted that as head of the Royal Society, Newton used his position to bury Hooke, going so far as to destroy his portrait and hide his papers. Hooke's papers at the Royal Society “disappeared” under the tenure of Newton, and weren't discovered until 2005!** Hooke's Diary wasn't published until 1935! Given that, we may assume that Hooke's first biographer Richard Waller had been instructed to blackwash Hooke to favor Newton. Many other authors followed suit, including Berry, Sullivan, Manuel, More, and Andrade. Not

until Gunther and Espinasse's research in the early 20th century was Hooke partially rehabilitated

from centuries of slander and abuse at the behest of Newton's agents. But by then it was too late: Newtonolatry had been set in stone for over two centuries. History had been written by the Phoenician Navy, and no one had the inclination to rewrite it.

We are told Newton discovered the inverse square law, but that, too, is false. Newton himself admits it isn't true, since he gives explicit credit to not only Hooke, but also Wren and Halley (see Principia, Book 1, Scolium to Proposition 4). We are told that it is his mathematical analysis of this problem that Newton is famous for, which is true in a way. But it worth pointing out that the Principia actually contains almost no math, at least in the form of number equations. These sections contain none. I know since I have already pulled them apart in detail in previous papers. <http://milesmathis.com/avr.html> This is precisely the section that $a=v^2/r$ comes from, and I have shown his math is actually riddled with basic errors. Newton also gives credit to Huygens in this section for the idea that gravity is like the centrifugal force of revolving bodies (like those swung by a string). Wrong again, though the idea persists up to the present time. All celestial bodies are in a dual (unified) field that includes charge, so the analogy does not hold. <http://milesmathis.com/ellip.html>

I have shown that the orbit cannot be described as a compound of the centrifugal force and a tangential velocity, so it really doesn't matter who Newton credits or does not credit. They were all wrong.

Besides, the analysis Newton does in these sections is mostly a copyjob of Kepler's earlier writings on the orbit, and Wiki even admits that. We are told there that Newton's addition to the problem was universalizing the treatment, treating the Moon's orbit around the Earth like the Earth's around the Sun, and so on. But do you really think no one had ever thought of that before? Kepler wasn't capable of making that simple analogy?

In fact, he already had, explicitly, in *Epitome Astronomiae Copernicanae* [1621].

Here is the sort of misdirection we find at Wikipedia on this subject today:

In January 1684, Sir Christopher Wren, Halley and Hooke were led to discuss the law of gravity, and although they probably all agreed[according to whom?] on the truth of the inverse square law, yet this truth was not looked upon as established. It appears[according to whom?] that Hooke professed to have a solution of the problem of the path of a body moving around a centre of force attracting as the inverse square of the distance, but Halley declared after a delay of some months that Hooke "had not been so good as his word" in showing his solution to Wren and started for Cambridge, in August 1684, to consult Newton on the subject. Without mentioning the speculations which had been made, he asked Newton what would be the curve described by a planet around the Sun on the assumption that the Sun's force diminished as the square of the distance. Newton replied promptly, "an ellipse", and on being questioned by Halley as to the reason for his answer he replied, "Why, I have calculated it."

No, Kepler had already calculated it decades earlier [*Astronomia Nova*, 1609], and they just admitted that a few paragraphs before. Are we really expected to believe Wren didn't know that? It is amazing to witness this kind of lying salesmanship 336 years after the fact. What most people don't know is that Newton even stole his title *Principia* from Kepler, who had given his *Epitome* the subtitle *Principia Doctrinae*.

By the way, although it can be shown Newton borrowed heavily from Kepler, Kepler was also a Jewish spook. His mother was a Guldenmann (Goldman), known to be a witch (spy). His father was a mercenary (spy) and his grandfather had been Lord Mayor. Kepler was a member of the Lincean Academy, or the academy of the Lynx. But we will have to do him another time.

Yes, Newton's analysis and synthesis was perhaps a necessary step in the history of this problem, but Newton's style—and even more the levels of his promotion—was another disaster, since his authority and fame prevented a fresh look until I hit the question about 20 years ago. Only Einstein—also of the Families—was allowed to tinker with these equations, and even Einstein was only allowed to add time separations. Neither Einstein nor anyone else ever pulled Newton's assumptions apart like a watch and put it back together in more logical order. We are now seeing why: Newton was a ranking Phoenician, and therefore was above reproach. You were simply not allowed to analyze him. Doing so was (and still is) professional suicide.

Does this mean Newton was a fraud? No. Unlike current theorists, he was a very smart guy who did a lot of real work in his field. But the example of his promotion has persisted up to the present day, only getting worse. His descendants are promoted at even greater levels, but with them the promotion is all that exists. Back of the promotion is only an empty room with lights blinking on and off, like a modern art exhibit.

Wikipedia has an entire subsection devoted to “Newton's poverty”. You have to laugh. All they do is tell us Newton's dues to the Royal Society were forgiven, but show no evidence this was because of his poverty. In fact, they show evidence to the contrary, since they admit he donated £40 to the building of the new library at Trinity at that time—a considerable sum. Even without reading beyond the gloss here, we can tell that Newton's dues were ended not from his poverty, but because he was special. He probably thought they should be paying him, and likely they were. We see the same thing in a similar line, when at the same time he received a patent from the Crown, waiving his requirement to take holy orders as part of his fellowship agreement. Again, he was special, even more special than the other special people at Trinity. Newton no doubt balked at this requirement he pretend to be Christian, much less holy, so they let him slide.

As for the calculus controversy, the Newton bias exists to this day in almost all accounts in the English language, including the one at Wikipedia. From the extensive review there, it is impossible to find any firm evidence, which is evidence itself of a cover-up. However, we do find this admission:

In any event, a bias favoring Newton tainted the whole affair from the outset. The Royal Society set up a committee to pronounce on the priority dispute, in response to a letter it had received from Leibniz. That committee never asked Leibniz to give his version of the events. The report of the committee, finding in favor of Newton, was written and published as "Commercium Epistolicum" (mentioned above) by Newton early in 1713. But Leibniz did not see it until the autumn of 1714.

That admission, by itself, is fatal to the Newton side. The committee never asked for any testimony from Leibniz, which of course means its finding was worthless. Even worse, Newton wrote the finding in favor of himself! And he didn't think that was a case of conflict of interest? As I am showing you, Newton was special. The rules didn't apply to him, including any basic judiciary rules. Bernoulli said as much in his letter, though he later denied writing it when pressed by Newton. Which just proves the point: Newton was so special Bernoulli was afraid to tell the truth—that Newton was special.

I could wade more deeply into this controversy, and my guess is I would find in favor of Leibniz. But it isn't really worth it, considering what I have proved about the calculus. The notation of both men was a disaster. More than that, their basic assumptions about how the calculus worked were dead wrong. Solving with decreasing differentials was unnecessary, unwieldy, and so confusing it cold-cocked all mathematical analysis for 350 years, up to the present time. This should have been solved as I solved it: with an updated version of the calculus of finite differences, using a constant differential of one. <http://milesmathis.com/calcsimp.html>

If that had been done, history could have avoided any number of meltdowns, including renormalization, borrowing from the

vacuum, virtual particles, and many more. A large part of the mania in physics and math in the past few centuries, peaking in the 20th, was caused by this daffy “infinitesimal” calculus, since it drove everyone mad. In their madness they could no longer see the possibility of a cleaner solution, a simpler notation, and a more intuitive grounding.

Now let us look at the claim that the Principia is full of Newton's calculus. At Wikipedia, we find:

His work extensively uses calculus in geometric form based on limiting values of the ratios of vanishingly small quantities: in the Principia itself, Newton gave demonstration of this under the name of "the method of first and last ratios"[25] and explained why he put his expositions in this form,[26] remarking also that "hereby the same thing is performed as by the method of indivisibles." [27]

Because of this, the Principia has been called "a book dense with the theory and application of the infinitesimal calculus" in modern times[28] and in Newton's time "nearly all of it is of this calculus." [29] His use of methods involving "one or more orders of the infinitesimally small" is present in his De motu corporum in gyrum of 1684[30] and in his papers on motion "during the two decades preceding 1684". [31]

Those footnotes go to Putnam, Truesdell, L'Hospital, and Whiteside. But L'Hospital and the rest must have read a different book than I did, since I found almost no calculus in it. Calculus is a math of rate of change, not just of vanishing quantities. In most instances, Newton's use of vanishing quantities is just a trick, and doesn't even work. For example, I have pulled apart his early lemmatae, <http://milesmathis.com/lemma.html> including lemmatae VI, VII, and VIII. In them, Newton has his lengths approach zero, yes, but that isn't calculus. He pushes them to zero only to claim they are therefore equal, which isn't even true. He says the ultimate ratio of arc, chord, and tangent is equality, which is not only absurd, it doesn't even allow for a solution. If they are equal, no ratios can be calculated and no equations come by. Only if they are unequal can solutions be found. Besides, if

anything vanishes, time also vanishes, and you can't find a derivative at a zero time interval or a zero length interval. The derivative has to be found at a real, non- zero, interval, as I have shown, so having things vanish in a physical treatise is just a magic act. It should never have been accepted for even a moment.

We are told, “Newton had been reluctant to publish his calculus because he feared controversy and criticism”. But does that sound believable to you? This guy who was promoted by the masters of the universe was worried about critics? This guy who has been sold as the smartest man in history didn't think he could answer criticism? In hindsight, we can see what he feared most was ridicule from someone like me, who could see through him. He obviously knew his method was slipshod in the extreme, and so he kept it hidden as much as possible until later in life, when he had the power to simply crush anyone who made a peep. The infinitesimal calculus has existed in that form ever since, you know, and still exists only because the powerful crush anyone who looks closely at it. Not to mince words, it is garbage and always been, in both Newton and Leibniz forms. Both its proofs and its daily use are heavily fudged, and I have shown that most working physicists are so confused by it they use it upside down about half the time. As with relativity, they can't even figure out how to apply it to most real problems. This would all be solved if they started using my calculus instead.

We are told that Newton made “substantial contributions” to the theory of finite differences, but that is pretty hard to believe. If he had had any clarity about finite differences, he would have realized his infinite calculus resolved to it, and thrown the latter in the trash.

We are told that Newton is generally credited with the generalized binomial theorem, but that is again a fudge. It is like the claim that Bucky Fuller invented the geodesic dome (when it was really invented by Bauersfeld decades earlier). All you have to do is go to the Wiki page for binomial theorem, where they admit it appears in Euclid in the 4th c. BC.

Halayudha knew about Pascal's triangle in the 10th c., and Bhaskara expressed it as a quotient in the 12th c. Al-Karaji proved both the binomial theorem and Pascal's triangle in the 10th c. But Indians and Persians don't count, you know.

As for Newton's Identities, they now put it this way:

These identities were found by Isaac Newton around 1666, apparently in ignorance of earlier work (1629) by Albert Girard.

Apparently? As I say, you have to laugh. Do you really think Isaac Newton, who was a Gerard/Garrard himself, didn't know about Albert Girard? Only recently have they begun to call them Girard-Newton Identities, though no one in English speaking countries does so, of course. See Girard's page at English Wiki. It is about ten sentences long.

What about the Newton Method? All you have to do is go to the page for that, where they admit the method had been known since ancient times, as the Babylonian method. In around 1400 the Iranian Al-Kashi had refined the method, and Vieta used the same method before 1600. But I guess Newton "apparently" didn't know about Vieta, although Vieta was a world-famous fellow noble and privy councillor to Henry IV of France. Descartes had already promoted and republished Vieta, but I guess Newton "apparently" didn't know that either. Furthermore, Newton applied his method to polynomials only and made no connection to his calculus (which is exceedingly odd). Even in this stripped-down form, Newton was again beaten to the punch by Joseph Raphson, who published it 46 years before Newton. His method is far simpler than Newton's and is the one that has always been used. Which is why some now call it the Newton-Raphson method. At least they admit Raphson was Jewish.

What about the gravitational equation? $F \sim Mm/R^2$. Again, Newton was only a collector and synthesizer, since all parts of the gravitational equation were known before him. The

inverse square law was known by Galileo and before him by Albert of Saxony [about 1380]. That gravity was a function of mass goes back even further, since the Persians knew this in the 11th century. It was also known that the equation was only a proportionality, since it didn't give the correct force or weight without a constant. Newton attempted to calculate the constant G , but didn't have much luck. His calculations were no better than those before him. In about 1645 Grimaldi and Riccioli had calculated G using pendulum swings.

As far as the cause of gravity goes, most people don't know that both Hooke and Newton proposed aether theories. Hooke proposed that bodies were emitting waves in the aether, and Newton proposed that aether streams attract bodies to one another. Newton thought that the aether was less dense near matter, which is of course upside-down to the truth. <http://milesmathis.com/grav3.pdf> Duillier, Le Sage, Bernoulli, Euler and even Lorentz proposed similar theories, with Lorentz using the EM field as his aether. We now know that was a step in the right direction. He needed charge, not EM, but he was on the right track. Given that, it is amazing the amount of effort expended in the 20th century burying those facts of history. No one is ever taught that Newton, Euler, or Lorentz proposed an aether. Anyone who now as much as whispers the word aether is pounced upon as a rube and crackpot. Any mechanical theory of gravity is treated like a theory of unicorns.

Why? Wiki tells us it is because “most” mechanical theories led to unobserved drag or to lack of conservation of energy. However, all historical theories of gravity have led to non-conservation of energy, since the force seems to come from nowhere. Has the current mainstream given us any theory of gravity that explains where the force comes from? Of course not. We have been existing with NO THEORY for hundreds of years. . . just a big hole. So why forbid work on the subject? I can only suppose it is to prevent any competition for the ridiculous quantum gravity theories which are allowed, but only from top theorists who happen to be from the families. Since they admit these theories are not mechanical—being no

more than flights of fancy—it is no wonder they can't countenance any competition from real theories.

Since the time of Newton, the standing and default theory of gravity has been his hypothesis non fingo. In other words, “we supply only the equations and don't ask the cause”. This fallback position has also been a disaster in the history of physics, since it seemed to give prestige to a refusal to theorize. In the 20th century this refusal to theorize was taken even further, and most theorists not only refused to theorize, they refused to allow anyone else to theorize. Mechanical theorizing in all subfields was forbidden. Those such as Bohr, Heisenberg, Pauli, and Feynman, ridiculed mechanical, visual, or physical theories as being somehow backward or otherwise uncool. Yes, physical theories were forbidden in physics. That attitude remains up to the present time, when graduate students in many subfields are strongly warned not to question and not to theorize. They are expected to learn the equations and parrot them, no more and no less.

As far as drag goes, I have shown how using the charge field solves this problem. <http://milesmathis.com/mond.html> One, they know there is unaccounted drag in the field equations—that is what is causing the galactic rotation problem, which only I have solved. Two, since photons are so small, this drag doesn't come up in most problems, explaining why it wasn't seen before the 20th century. Three, since photons recycle through matter, this drag is again negated in most terrestrial situations. Four, I have shown the amount of drag can be easily calculated straight from the photon density, using simple mainstream numbers, proving not only the existence of charge drag, but its size.

What about Newton's three laws of motion? Well, Newton himself gave credit to Galileo for the first two. He admits he has only “laid down such principles as have been received by mathematicians”. The second law is a restatement of Galileo, and like Galileo, Newton makes no mention of acceleration. Both men use the word “motion”, not velocity or acceleration. So it is not clear from the law itself how compounded motions

are compounded. Newton does not provide the equation $F=ma$, since he also does not mention mass in that law. The third law was also known by many before him, including Leonardo.

OK, let's now look beyond Newton's physics and math. In 1689, at age 46, Newton became MP for Cambridge, a post he held for 12 years. We are told he did nothing in Parliament but complain of the cold, but that is highly unlikely. More likely is that his various projects have been suppressed. We know he began working in religious disputation in these years, which now looks to me like a project to damage Christianity. We know he was an Arian, which is strange enough: why would a physicist—especially one who refused to take holy orders—go out of his way to deny the Trinity? And he was at Trinity College, remember? Just 150 years earlier, John Calvin had (allegedly) been burning alive Arians. So why would Newton wish to get involved in that?

Which demands a divertissement. Miguel Serveto, the one allegedly burned by Calvin, was another spook from a noble family, so the event was probably another hoax. Arianism looks to me like another invented schism. In support of that, they now admit that Serveto was a Zaportas through his mother, making him a wealthy crypto-Jew. The Servetos called themselves Reves, which we are told is a nickname. Very strange, but we can link this to Keanu Reeves, who I showed was descended from Marranos of this area and time. <http://mileswmthis.com/keanu.pdf> At age 21, Serveto was already working for the Holy Roman Emperor Charles V, as secretary to his confessor Juan de Quintana. Quintana had known Serveto as a boy, so they may have been lovers. In their service to Charles, Serveto and Quintana were inquisitors, and Quintana had taken part in suppressing the Alumbrados and the Moriscos for heresy. So it is very suspicious to see Serveto later being burned for heresy. We are told Serveto left the service of Quintana and Charles after only a year, and immediately began publishing against the Trinity. At age 22 he published *On the Errors of the Trinity*. Really? After just leaving the service of the inquisitor? Does that make any

sense? Or do you think that maybe he was on assignment? How else could he find a publisher for that? Servetus later became personal physician to the Archbishop of Vienne, but I guess we are supposed to believe this Archbishop couldn't read. He didn't realize he had hired a heretic. At that time, Serveto and Calvin became friends. Calvin eventually discovered Serveto's anti-Trinitarianism and broke with him, but Serveto wasn't accused until about six years later. . . by a rich merchant in Geneva named Guillaume de Trie.

Surely you are smelling smoke by now. The de Tries were an ancient family of Jewish merchants with strong ties to Palestine. They were descended directly from Charlemagne. They were Counts of Dammartin, related to the Bourbons, so de Trie was a cousin of Charles V, Holy Roman Emperor, who was also a Bourbon. This indicates that Serveto was still under contract to these people, and that this entire event was manufactured. Calvin was part of the hoax, since he was also related to all these people. Among the other Counts of Dammartin was Manasses Calvus, of the house of Montdidier. He was the first count. The Calvins had been involved in this stuff for centuries: John's father Gerard had himself been excommunicated for heresy, though we may assume that was another fake.



That's John Calvin, or Jehan Cauvin. His face tells you everything. No genealogy is available for him and his bio is mist. According to the pages at Wiki, he began studying law at age 16 and was a lawyer by age 23. Somehow, in the next year (1533) he was a friend of the rector of the College Royal, Nicolas Cop. The College had just been founded three years earlier by King Francis I, a big supporter of religious schisms, since they allowed him move easily against his enemies. Cop's father was Francis' personal physician, just so you know. So Cop was obviously an agent of the King.

On All Saints Day, November 1, 1533, Nicolas Cop as rector delivered his inaugural address, in which he revealed himself as being in sympathy with Luther.

That doesn't seem suspicious to you? That the King would install a new rector, who immediately delivered a heretical speech? And this same King would later allegedly burn many heretics? Just two days later, Cop was accused in the Parlement de Paris of heresy, and the King mysteriously did not come to his aid. Cop fled to Freiburg, where he holed up with Erasmus. The King used this manufactured event to curse the Lutherans. But at the same time the King's sister Marguerite of Navarre supported Cop. She was probably funneling money to him from the King, for a job well done. Calvin fled with Cop, beginning his role in this creation of controversies.

I will have to hit Calvin in more depth another time, but this divertissement was necessary to show you how these things were done at the time (and now). Maybe now you can understand where I was going with Newton. Newton didn't get heavily involved in exploding the Catholic Church, but he did get his feet very wet. Had he published his views, he could have caused major controversy, though Rome was no longer the force it had been in England a century and a half earlier. Newton also rejected the immortal soul, and was said to be more a Socinian than an Arian. Newton refused last rites,

indicating he was not a believer (in Christ) at all. Even without publishing a full account of his religious views, Newton was able to sow discord and cause lasting harm to the Church. His followers used his theories to promulgate a mechanistic view of the cosmos, one that displaced not only Christ but God himself.

But Newton was not an atheist. He was a believer in intelligent design and was mainly a deist. His ties to millenarianism once again betray his Jewish links, but we have already established those. In this way, Newton is once again preferable to his descendants in physics, who believe in nothing but their own petty-godlike powers to determine Nature, via such absurdities as the Observer Principle.

As Newton put it:

Opposition to godliness is atheism in profession and idolatry in practice. Atheism is so senseless and odious to mankind that it never had many professors.

His descendants and idolaters didn't learn that lesson from him. For we should change it to, until the 20th century, atheism never had many professors. Atheism wasn't just a quiet default stance for most scientists in the 20th century, it was the noisy and obnoxious stance for many, and the all-but-required stance of the rest. Like the arcs in Newton's lemmatae, the number of prominent living scientists who will admit to a belief in God or gods is vanishing.

As for his studies in prophecy and revelation, I lump these in with his disputation project. Many at that time (as always) were hired to sow religious discord, and Newton's writings look like just more of the same. He predicted the world would end or change drastically in 2016, and that of course didn't happen. But you have to ask yourself why any serious person would get involved in predictions of that sort. I can find no other answer than, he was paid to.

More evidence of that can be found. Newton claimed to believe that Jesus dominates both Old and New Testaments. He claimed to believe that all appearances of the Lord in the Old Testament are to be read as appearances of Christ: it was Jesus who walked in the Garden of Eden; it was Jesus who gave

Moses the Ten Commandments; it was Jesus who appeared to Abraham as an Angel; it was Jesus who fought with Jacob; it was Jesus who gave the prophecies to the prophets. Not only was that heretical at the time, it was guaranteed to anger both Christians and Jews. No one not pushing a project of chaos and schism would ever propose such things, but especially not a famous scientist being promoted as the greatest of all time. Plus, if Newton actually believed any of that, then why did he refuse last rites?

[Also remember that we are told Newton learned Hebrew so that he could read old documents in the original language. Yes, that is a possibility. Another possibility is that he learned it as a child at home. More evidence in this line is that Newton based his age of the Earth from creation—4000 years BC— on the Masoretic text, not the Septuagint. Most or all of those famously pushing this date and using the Masoretic text were Jewish, including of course Kepler, Maimonides, Pereira, and Henry Fynes Clinton— who was probably a cousin.]

Which is precisely why this part of the Newton project later had to be buried. Someone realized soon after Newton's death that these projects were mutually exclusive. Newton couldn't be promoted as the greatest physicist of all time while at the same time admitting he had been involved in such outlandish disputation. Someone might figure out what I have, and the whole Newton project would collapse under the weight of these absurdities. So when a large cache of Newton's Biblical writings were auctioned in 1936 at Sothebys, most were bought by Professor Abraham Shalom Yahuda.

This requires another pause. Yahuda, Jewish of course, was also a spook. He attended the First Zionist Congress. . . at age

17. He later ended up at the New School in New York, a gigantic red flag. Yahuda died in 1951, and after an 18-year court battle over his will, the papers ended up at the Jewish National Library in Jerusalem. That is your next clue. I say Newton's religious papers were a Jewish project of division, so it is no accident they ended up in Jerusalem. Those at the Jewish Library couldn't have wanted the collection because it replaced Abraham's Angel with Jesus, right? Do you really think any Jews are thrilled about that theory? So why did they want it? I am telling you: they wanted it because they knew the actual theories weren't to be taken seriously. Not even Newton took them seriously. Jerusalem wanted the papers because they were from one of their own, promoting one of their very own projects.

Should we lump his alchemical studies into the same project of misdirection and schism? I don't think so. These were considered genuine scientific studies at the time, and why not? We now know transmutation of elements is possible, though not, we think, in beakers over normal flames. It requires high heat and pressure in stars, or very high-energy bombardment in large machines. But there may be other methods, and it is remotely possible Newton created gold from baser elements. Remember, he worked during these years at. . . the Mint. What better place to hide newly created gold? Plus, Newton moved England from the silver standard to the first gold standard:

This inadvertently resulted in a silver shortage as silver coins were used to pay for imports, while exports were paid for in gold.

Nothing like that is ever inadvertent. Why would England want to switch to a gold standard? Maybe because it had an endless supply of gold?

Besides, Newton didn't just pretend to work on alchemy, he actually did, to the great detriment of his health. Hair samples taken from his corpse later showed heavy poisoning by mercury, lead, antimony, and arsenic, all used in the

transmutation to gold. Already by 1692 he was showing signs of this poisoning, and spent two years of that period trying to detoxify. His nervous system almost collapsed,

and he spent 18 months in convalescence. He had 108 documented experiments with these metals, and probably many more undocumented.

Which brings us to that, the last sign of his spookiness I will hit in this paper. In 1696, Newton became Warden of the Mint, a position obtained for him by Charles Montagu, 1st Earl of Halifax. Halifax was the Chancellor of the Exchequer under William III and later head of George I's cabinet. You might want to ask yourself why Newton would accept this position. You will say it was a well paying sinecure, but Newton didn't treat it like that. He retired from Cambridge in 1701 and pursued his new duties with a very strange zeal. Why would the smartest man in the world waste his time chasing forgers and counterfeiters? Newton actually dressed in disguise and went undercover in bars and taverns to pursue counterfeiters, we are told. And you believe that? He was almost 60 and not in great health.

For myself, I believe he may have dressed in disguise and been involved in intrigue, but not this petty intrigue of counterfeiting. I believe Newton was always an agent, but as is common, the assignments change. His early assignment, chosen by himself, was as a physicist/mathematician. He took that part/assignment very seriously, as we know. After about 25 years, he had done all he could do there, so he asked for a reassignment. They needed more talented people in religious disputation, so he got involved there for a while. But after a few years that got old, so he asked for something more interesting. By then he had the rank to do just about anything, so they installed him at the Mint. But that was just a cover. Possibly it was, in small part, a cover for his creation of gold, but if so, he no longer needed to be involved there as a lab guy. Once the formula was known, they could hire others to do the dangerous work with Mercury and so on. So I think something else was going on. The primary clue there is that Newton was

knighted in 1705 by the Queen, and he was only the second scientist to ever be knighted, after Sir Francis Bacon. Strangely, the histories admit Newton was not knighted in recognition of his scientific work. That admission should leap from the page at you. So Newton was knighted for some other reason, not given. Well, what did we find out about Bacon in my paper on the Occult? We found that the torch had been passed to Bacon by John Dee, and this torch was the torch of British Intelligence. I suggest that torch was passed to Newton in these years, and that he then became the head of British Intelligence, with the Mint as his cover.

As the next clue in that direction, remember that Newton was involved in the South Sea Company, allegedly losing \$3 million when it collapsed in 1720. But you can be sure that never happened. These people never lose in such scams, they only win. The South Sea bubble was created on purpose, to scam money from small private investors. Part of that is now admitted:

The founders of the scheme engaged in insider trading, by using their advance knowledge of the timings of national debt consolidations to make large profits from purchasing debt in advance. Huge bribes were given to politicians to support the Acts of Parliament necessary for the scheme. . . The expectation of profits from trade with South America was talked-up to encourage the public to purchase shares

So in this sense it was like the Titanic insurance fraud, where smaller members of the syndicate were robbed in a fake collapse, while the larger members were shielded. Being a larger member here, we can be sure Newton was shielded.

Another clue is that Newton lived at Cranbury Park, a gigantic mansion in Winchester.



We are told that house was owned by John Conduit, but as with Newton, we are not told Conduit was in the peerage. He was. He is listed with no parents, which is suspicious. His only link is to Catherine Barton, whom he allegedly married in 1717. But she was the previous mistress of. . . Charles Montagu, Earl of Halifax. Remember him? We just saw him above, Chancellor of the Exchequer who got Newton his job at the Mint. Well, Catherine Barton is the pin here, since she was a relative of Newton. Her grandmother was Hannah Ayscough, mother of Isaac Newton. So she was Newton's adopted niece.

Still, none of these people except Halifax should be listed in the peerage. Barton should not be listed in connection with him, since she was just a mistress, and therefore Conduit should also not be listed. If what we are told by the mainstream were true, Isaac Newton should not be there either, since knights are not listed as peers. So we have more proof the Newtons are peers.

As for Halifax, he comes from the Montagus, Earls of Manchester, linking us immediately to the Spencers. If we take these Spencer baronets forward again to the time of

Newton, we find the 3rd Baronet Sir Thomas Spencer marrying Jane Garrard, daughter of the 2nd Baronet Sir John Garrard. We have already seen the Garrards, haven't we? Not only was Newton a Gerard/Garrard, but the Garrards were related through the Barkhams to the . . . Walpoles.

Robert Walpole, Earl of Orford, was involved in the South Sea bubble as well, and he had already been convicted of "notorious corruption" in 1712. He was expelled from Parliament and allegedly spent six months in the Tower of London. But somehow he was re-elected to Parliament the very next year and started all over again. Make sense of that if you can. When George I came in as King in 1714, he took a liking to Walpole, no doubt needing the most venal people around him he could find. Another of these was Halifax, who became the head of his cabinet. I tell you all this to remind you of Newton's real family connections. He was closely related to both Halifax and Walpole, which may make it easier for you to believe he became head of the most covert part of British Intelligence.

In 1715 Halifax died and Walpole became Lord of the Treasury and Chancellor of the Exchequer. In other words, Thief #1. The South Sea scam was Walpole's baby, and it was his plan to have the South Sea Company "assume the national debt of Great Britain in exchange for lucrative bonds". No, seriously, that is what it says on Walpole's Wiki page. A private company, with no royal charter, was going to assume the national debt! Oivay caramba. They admit Walpole sold at the top of the market and made 1000% profit. Although there was an investigation, all the top dogs, including Walpole, Stanhope, and Sunderland (all Earls, of course) skated. The fall guys were James Craggs the Elder (Postmaster General) and his son the Younger (Southern Secretary), who conveniently died as soon as they were indicted. You can be sure they faked their deaths and retired in huge wealth to the Caribbean or somewhere.

Here is your next clue:



That's Newton's coat of arms, chosen by himself. He is supposed to have borrowed it from the Newton family of Great Gonerby, but I found no evidence of that. We do know that is a sign of Intelligence and other spooks, see Skull and Bones, the Jolly Roger, military use, secret societies, various fraternity and sorority emblems, and many peerage coats of arms. That is basically Newton admitting he was a spook. If you don't believe me, you tell me why a famous physicist would choose that as his coat of arms. If you were a famous physicist, would you choose that as your coat of arms? I wouldn't. Those doggy bones are about the last thing I would choose.

So what projects was Newton working in those years? Hard to guess, since they still haven't declassified those projects. But as the equivalent of head of MI5, Newton may have been working on local cases tied to the War of the Spanish Succession. Spies would have entered England on that project, and Newton's job would be intercepting them or nullifying them. Starting in 1714, Newton probably had his hands full with the Jacobite uprisings. He may have been involved with Deborah Churchill in 1708, since her story looks fake. Given her name and upbringing, she was probably a spy in the service of England, the story a cover, and her death faked.

Newton may also have been involved in the Christopher Slaughterford case, since this also has all the signs of a fake. What it was covering I cannot say. Possibly the person he allegedly murdered, Jane Young, was a spy who needed to disappear. So her murder was faked and he took the rap. They sent him to France and staged a hanging with a planted audience. Things like that were done all the time, and still are. We have seen it many times. If the execution had been real, you wouldn't still be reading about it 300 years later.

Newton may also have been involved in the Sacheverell, Coronation, and Rebellion riots, which were obviously staged by the government. The histories all but admit that, when they say the first riots were a reaction to perceived grievances against the Whig government, in regard to high taxation resulting from the War of the Spanish Succession, the recent sudden influx of some 10,000 Calvinist refugees from Germany,[3] and the growth of the merchant classes, the so-called "monied interest".

Yes, but why would this reaction be aimed at Presbyterians? Were they to blame for high taxes? We are told it is because they tended to support Whigs, but that makes no sense. Why not attack Whigs then, instead of Presbyterians? As usual, the government, either Whig or Tory, wanted citizens attacking each other rather than attaching them. So they provocateured some riots to create division and divert attention from the real culprits.

Henry Sacheverell allegedly started the first riots by preaching against the Whigs. He was an obvious spook from a family of spooks. This is easiest to see by his patron, Thomas Thynne, Viscount Weymouth, also a fellow of the Royal Society with Newton. Weymouth had been a fellow for almost 40 years. He was also a Privy Counsellor. So we see a Privy Counsellor supporting riots. Sacheverell's other major supporter was Sir William Trumbull, who was a top Whig. So why would Trumbull underwrite Sacheverell's firey sermons against Whigs? Now you know. And who was the Lord Mayor of London at this time? It was none other than Sir Samuel

Garrard, 4th Baronet, and he is the one the appointed Sacheverell to deliver the famous sermon. So we get that name one last time, bringing this full circle. As we have seen, Garrard was also related to Newton.

I will be reminded that the Tories won a landslide victory that year (1710) in part due to this riot. But why would people like Trumbull, a Whig, promote that? Because the Whigs and Tories were pretend opposition, like the Democrats and Republicans now. Both were fronts for the fascist peerage, and the important thing was to keep the public's eye away from that fact. Public opinion was therefore manipulated back and forth from one to the other, making them think change was always at hand. When in fact nothing ever changed, and still hasn't. The important thing was to keep the public from ever seeing the truth: it wasn't a matter of Whig or Tory, left or right, Democrat or Republican. It was always a matter of the peers against the rest, the few privileged families against the masses. The masses therefore had to be constantly divided against themselves, diverted by manufactured events, and confused by a constant string of fantastic lies. Such people can never find the footing for a revolution, or even for a meaningful counter-movement. They are so disempowered they can barely remember how to get out of bed in the morning, and without an alarm clock to drum them awake and the TV to remind them of their daily tasks, they probably never would.

*John Constable's father was Golding Constable, a wealthy corn merchant and shipowner. His mother was a Watts. Constable's cousin was tea merchant Abram Newman, one of the wealthiest men in England at the time, whose tea was thrown into the Boston Harbor in the Boston Tea Party. Newman's great-uncle Rawlinson was Lord Mayor of London in 1706. The Constables were Viscounts Dunbar and also Baronets, related to the Howards and Haggerstons. John Constable the artist is listed in the peerage, though we aren't told why. He links to no peers, since both his parents are scrubbed. His grandfather is not listed, probably to break the link to Newton and to the Viscounts Dunbar. Geni tells us he

was Hugh Constable, b. 1667. This helps because we can take the new information back to Newton's pages at Geneanet, where we find his Constables move forward through Marmaduke Constable to an Anne Constable who married a Haggerston. Her daughter married a Middleton. This links us to the Baronets Constable. Through another Marmaduke Constable we link forward to Rhodes and Pilkingtons. See above, where we found Newton was a Pilkington. We can also link Constable to Newton through Constable's grandmother Garrad. We saw both the Gerards and Garrards above, and this is just a third spelling. So Newton and Constable were cousins, maybe fifth cousins twice removed.



****They still aren't saying where Hooke's papers were found. We are supposed to believe they were found in someone's cupboard in Hampshire. The Royal Society allegedly had to pay over £1 million to get them back.**

This article goes far, but not far enough!...

**Satanic Secret Agents, Aristotle;
Contarini, Pomponazzi and Giorgi;
Sarpi, Galileo and Kepler; Conti,
Newton and Leibniz - The Satanic
Corruption of Science by the Satanic,
Slave Trading, Drug Running, Bankster
run Venetian Empire**

**By Webster G. Tarpley Ph.D. with additions by
Satchidanand**

**Get the free book, "Against Oligarchy" from
<http://tarpley.net/>, or as I would put it "Against
Satanism"**

**There is a cancer growing on world history – the
cancer of Satanism.**



Between 1200 A.D. and about 1600 A.D., the world center of gravity for the forces of Satanism was the oligarchy of Venice. Toward the end of that time, the Satanic Venetian oligarchy decided for various reasons to transfer its families, fortunes, and characteristic outlook to a new base of operations, which turned out to be the British Isles.

The old program of a worldwide new Satanic Roman Empire with its capital in Venice was replaced by the new program of a worldwide new Roman Empire with its capital in London – what eventually came to be known as the Satanic Slave Trading, Drug Running, Bankster run, British Empire and the Anglo-American Establishment.

This was the metastasis of the cancer, the shift of the Satanic Venetian Party from the Adriatic to the banks of the Thames, and this has been the main project of the world Satanism during the past five centuries. The Satanic Venetian Party, wherever it is, knows that ideas are more powerful weapons than guns, fleets, and bombs.

They spend money and intelligent evil Secret Agents to project Satanic ideas and assassinate the rest.

Satanic Control comes from the Satanic, "Policy of Poverty" and the Satanic, "Policy of Poisoning" by means of the, "Borgia Cup" and indeed Satanism itself.

These policies are designed to weaken the opposition to the Satanic Religious leaders whose aim is to continue ruling humanity as they have ruled the Human Herd for 10,000 years since Satanic Babylon.

All religions are created by the Fascist Robber Barons whose Genealogy goes back to Satanic Babylon and their created Religions of Satanism, Luciferianism, the Cult of Apollo, Dionysus, Isis, Horus, Osiris have been created to control the upper levels of society for the real Robber Baron owners for thousands of years. Because if you believe a created, infiltrated

religion, you will believe anything, do anything for the compartmentalised top of the Hierarchy.

Yet, "False Gold is there only because Real Gold Exists" - Tamil Siddar Alchemist Thiruvalluvar

Satanism itself is a created religion designed to degenerate and control its adherents

If a member of the Fascist Robber Baron Elite partakes of the normal Satanic Rituals extant for thousands of years designed to reduce people to the level of a psychopathic beast of..

1. Animal and human sacrifice rituals.
2. Canibalism rituals.
3. Drug rituals,
4. Sex rituals - homosexual sodomy rituals - pederasty rituals - bestiality rituals - torture rituals.
5. The castration rituals of Cybele and Attis.

and then you have your pictures and videos taken of you doing it, then you tend to follow orders!!

Satanic Fascist Intelligence - based on the Babylonian Secret Services whose greatest Secret Agent was Aristotle the Poisoner because he poisoned Alexander the Great - created cults like Communism used to kill the Czar of Russia an destabilise the working class of any country (Marx worked for British Intelligence MI6 Ambassador Urquhart from an office in the National Library in London), Anarchism, Wahabism, Salafism, - created by Secret Agent Lawrence of Arabia - and Al Qaeda are used to create satanic mercenary armies to destabilise and take over countries, create chaos, destroy infrastructure and therefore create poverty - THE POLICY OF POVERTY - TO CREATE CONTROL..

Rather than concentrating on problems with food, security and housing which poverty induces in all, only wealth and education can lead humanity to evolutionary meditation the foundation of Human Evolution to the Stars.

Realise that Austerity is not an accident.

Everything must be planned.

If Austerity can be planned and executed for the USA and Europe over 50 years since the assassination of John Kennedy then wealth too can be planned!!

Only wealth can lead Human Evolution to the Stars, therefore antievolutionary Satanism created by the Robber Baron oligarchic elite for the purpose of creating poverty, so as to maintain their control over thousands of years, has acted to degrade every part of human society including science as the Satanic Frankfurt school has acted to similarly degrade philosophy, music and art, and the Satanic Robber Baron Drug trade has acted to destroy all culture and civilisation and the poisoning of air, food and water by fluoride, genetically modified foods, glyphosate and other pesticides, and incinerator dioxins and VOC's to destroy the health and energy of all humanity.



In order to secure acceptance for their Satanic ideas, the Satanic Venetian Party seeks to control the way people think. If you can control the way people think, say the Satanic Venetians, you can control the way they respond to events, no matter what those events may be.

It is therefore vital to the Satanic Venetians to control philosophy and especially science, the area where human powers of hypothesis and creative reason become a force for improvements in the order of nature.

It is therefore vital to the Satanic Venetians to control science because Science is the source of all Wealth creation which can lift Humanity from the level of a beast to Enlightenment itself

President Roosevelt recognised this in his proposed, "Economic Bill of Rights".. We have come to a clear realization of the fact that true individual freedom cannot exist without economic security and independence. "Necessitous men are not free men." People who are hungry and out of a job are the stuff of which dictatorships are made.

Satanists recognise this because their, "POLICY OF POVERTY" has controlled Humanity since Satanic Babylon.

The Satanic Venetian Party, all Satanists, are implacably hostile to scientific discovery.

Since the days of Aristotle, they have attempted to suffocate scientific discovery by using formalism and the fetishism of authoritative professional opinion. The Satanic Venetian Party has also created over the centuries a series of scientific frauds and hoaxes, which have been elevated to the status of incontrovertible and unchallengeable authorities. These have been used to usurp the rightful honor due to real scientists, whom the Satanic Venetians have done everything possible to destroy.

We can identify the Satanic Venetian faction which has been responsible for the most important of these scientific and epistemological frauds. They can be called the "Satanic Dead

Souls” faction, or perhaps the “no-soul brothers” of Satanic Venetian intelligence.

The Religious Leaders of Satanism degenerate their adherents in order to rule them and through them rule all humanity by saying that human beings have no soul. Their satanic creed is the idea that human beings have no creative mental powers, are incapable of forming hypotheses, and cannot make scientific discoveries.

Below we have a history of The Dumbing Down of Science by Satanic Venetian agents in 1500, 1600, and 1700's. But this work has continued with innumerable other Agents in the 1800's, 1900's and 2000's. For example amongst many others we have the work of Lord Bertrand Russell - Principia Mathematica - designed to Dumb down mathematics. Fortunately Goedel proved it wrong before he was assassinated.

It is not only Science. Economics is totally Satanic. Adam Smith and his, "Wealth of Nations" was written at the behest of the Slave Trading, Drug Running, Bankstering, British East India Company by Lord Shelburne - Therefore the Boom/Bust cycle and Depressions are totally under the control of the Satanic Elite, thus the rise of Fascism and World Wars.

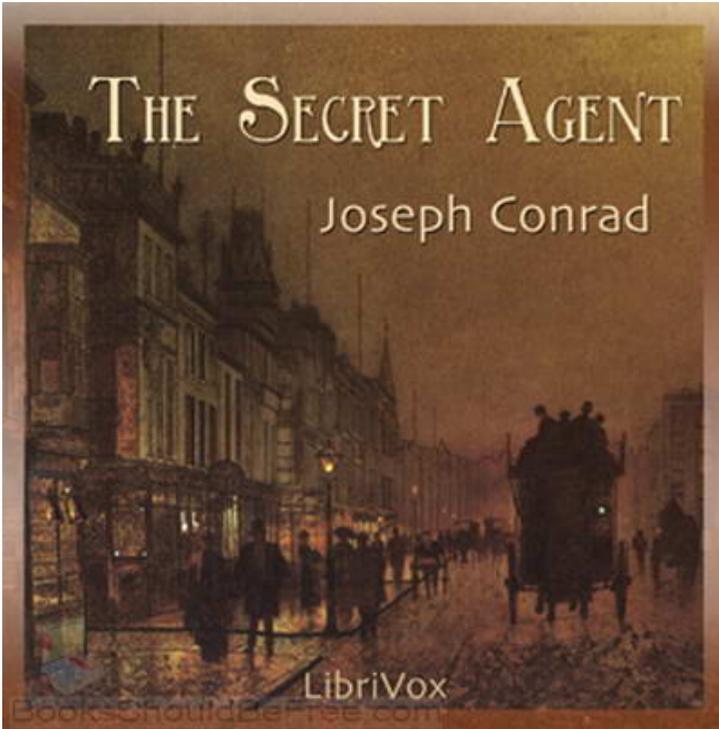


Nelson Rockefeller paid Von Mises and Von Hayek - whose book resided by the bedside of, "Tamp the Dust Down" Margaret Thatcher - to write Austrian Economics - just to make Austerity or Poverty popular in Europe and the USA. Just in time for World War III.

Most of these Satanic Secret Agents were and are very active in politics. Martin Luther was a Secret Agent of Satanic Venetian Cardinal Contarini.

It is also Science. Fusion Power research has been stopped and thus slowed down. NASA and Space Exploration including the mining of the Asteroid Belt cancelled and thus slowed down. Clinton cancelled further research in the IFR 4th Generation Fission Power Generation and its ability to burn all nuclear waste.

THREE GROUPS OF Satanic Venetian Secret Agents



We can approach these Satanic Venetian Dead Soul Secret Agents of Satanic Venice and the Satanic British Empire in three groups.

VENETIAN MASK - LIKE THE MOVIE, "EYES WIDE SHUT"



1. First there is the group around Satanic Pomponazzi, Gasparo Contarini, and Francesco Zorzi, who were active in the first part of the 1500s.

2. Second, there is the group of Satanic Sarpi and his right-hand man Fulgenzio Micanzio, the Secret Agent case officers

for Galileo Galilei. This was the group that opposed Johannes Kepler in the early 1600s. All of the work done by Kepler was stolen by Galileo. Worse, his hypothetical methodology was lost and substituted by reductionism and Satanic Empiricism.

3. Third, we have the group around Antonio Conti and Giammaria Ortes in the early 1700s. This was the group that created the Newton myth and modern materialism or utilitarianism and combated the wealth economics and advanced science of 200 IQ Gottfried Wilhelm Leibniz.

All of the work done by Leibniz was stolen by Newton. Worse, his hypothetical methodology was lost and substituted by reductionism and Satanic Empiricism.

These three groups of Satanic Venetian Agents are responsible for All the obscurantism and garbage that weighs like a nightmare on the brain of humanity today for the purpose of slowing progress in the cause of the, "Principle of Poverty".

These Satanic Venetian intelligence officials are the original atheists and satanic materialists of the modern world, as reflected in the sympathy of Soviet writers for figures like Galileo, Newton, and Voltaire as ancestors of what was later called dialectical materialism - or Satanism.

The leading figure of the first grouping in the early 1500s was Cardinal Gasparo Contarini. In other locations we have told the story of how Contarini, for Satanic Venetian *raisons d'état*, set into motion the Protestant Reformation, including Martin Luther, King Henry VIII of England, Jean Calvin of Geneva, and the Italian crypto-Protestants known as *gli Spirituali*.

At the same time, Contarini was the Cardinal of the Roman Catholic Church who masterminded the early phases of the Catholic Counter-Reformation with his Agent, Luther.

Contarini was the personal protector of Ignatius of Loyola, and played a decisive role in establishing the Jesuit Order.

Contarini also convoked the Council of Trent on a Satanic Aristotelian platform.

It is with Satanic Pomponazzi - Professor of Philosophy at the Venetian University of Padua where all Elite Venetian sons were taught, and also where Satanic Portia - who chose an easily controlled Lead suitor - went for advice in the anti-venetian, "Merchant of Venice" by Shakespeare - that we see the explicit factional pedigree of the Satanic Dead Souls faction.

Satanic Agent Pomponazzi started from Satanic Babylonian Secret Agent Aristotle as the Satanic Venetian Party always does. Aristotle asserted that there is no thought which is not mixed with sense impressions, that the Soul is not immortal. This meant that there is no part of our mental life which is not contaminated by matter. For Satanic Pomponazzi, this proved that the soul does not exist, since it has no immaterial substance.

The Soul does exist!!

Venetian Agent Cardinal Contarini warned Satanic Pomponazzi not to take this matter any further, but also remarked that the only time that the existence of the soul is really certain is when the person is already dead. For Contarini, as a practical matter, there is no empirical human soul that you can be aware of while you are still alive.

Agent Francesco Zorzi was the envoy of this group to Henry VIII, to whom he became the resident sex adviser. Zorzi illustrates the typical profile of a Satanic Venetian intelligence operative in the early 1500s: He was a Franciscan friar whose main occupation was black magic of the Rosicrucian variety. He was a conjurer, a necromancer, an apparitionist. Think of Christopher Marlowe's Doctor Faustus, and you have the portrait of Zorzi. Not exactly a role model for science nerds of any age. As the 1500s turned into the 1600s, this profile began to present serious drawbacks and limitations.



DR FAUSTUS - MEPHISTOPHELES



Satanic Sarpi AND GALILEO



Until about 1600, the posture of the Satanic Venetian Party toward science was one of more or less open hostility, favoring black magic and Sexual and Sacrificial Ritual. But in the early 1600s, the group around Satanic Sarpi succeeded in changing their public profile from being the enemies of science to being the embodiment of the most advanced and sophisticated - Dumbed Down - science.

For several centuries after this, the Satanic Venetians would work inside the scientific community to take it over and suppress Wealth Creation.

They would claim to represent the highest expression of scientific values. In this way, they could institutionalize the dead hand of formalism and the fetishism of authority, so as to stifle the process of scientific discovery.



The chief of Satanic Venetian intelligence who made this possible was 200 IQ Satanic Sarpi. Satanic Sarpi and his friend Fulgenzio Micanzio were Servite monks. Satanic Sarpi was part of an important Satanic Venetian salon of the day,

the Ridotti Morosini, which met for discussions in the palace of the Morosini family on the Grand Canal.

The Morosini were the direct ideological heirs of Gasparo Contarini. The Morosini salon centered on a discussion of science, and it became the nucleus for the youthful faction of the Satanic Venetian oligarchy, the so-called *Giovani* - the Youngsters - who became powerful after 1582.

The *Giovani* favored a policy of cooperation with Holland, England, and France in conflicts with the Austrian and Spanish Hapsburgs and the papacy. The *Vecchi*, the oldies, serviced the Satanic Venetian networks on the Spanish and papal side, which were also quite extensive.

We have told in other locations how Satanic Sarpi organized and unleashed the Thirty Years' War in Central Europe, using agents like Max von Thurn und Taxis, Christian von Anhalt, Christoph von Dona, and the Elector Palatine Frederick, the so-called Winter King.

In this sense, Satanic Sarpi personally exterminated about one-third of the entire population of Europe, and about one-half of the population of Germany and surrounding areas.

Satanic Sarpi also caused the assassination of King Henry IV of France when Henry opposed Satanic Sarpi's designs and exposed him as an atheist. Satanic Sarpi, we see, is a worthy predecessor to Lord Bertrand Russell.

But Satanic Sarpi in his own time was considered an eminent mathematician. One contemporary wrote of him: "...I can say about him without any exaggeration whatsoever that no one in Europe excels him in the knowledge of [mathematical] sciences." This is the view of Satanic Sarpi held by Galileo Galilei.

Satanic Sarpi's companions at the *Ridotto* Morosini during the 1590s included the influential mystic Giordano Bruno. Starting in 1592, there was also a professor of mathematics at

the nearby University of Padua: Galileo Galilei, a native of Florence. Galileo taught mathematics in Padua from 1592 to 1610, and it was during his stay on Satanic Venetian territory that he became a celebrity.

Galileo was a paid agent of Satanic Sarpi and, after Satanic Sarpi's death, of Satanic Sarpi's right-hand man Micanzio. There is a correspondence on scientific subjects between Satanic Sarpi and Galileo, including on magnetism, which was Satanic Sarpi's favorite, because he found it occult. Galileo proposed some of his first ideas on falling bodies to Satanic Sarpi, who enthused that Galileo had been born to solve the question of motion.

Galileo's fame was procured when he used a small telescope to observe the moons of Jupiter, the rings of Saturn, and the phases of Venus. He reported these sightings in his essay *The Starry Messenger*, which instantly made him the premier scientist in Europe and thus a very important agent of influence for the Satanic Venetian Party. This entire telescope operation had been devised by Satanic Sarpi.

The first telescope had been built by Leonardo da Vinci about a hundred years before Galileo. Susan Welsh has called attention to the research of Domenico Argentieri on Leonardo's optical manuscripts, which demonstrates that Leonardo's telescope had a convex lens at one end and a concave lens at the other. Its magnifying power was rather weak, but it was a telescope. There are reports of a telescope made in Italy in 1590. By 1608, telescopes began to turn up in Holland, and Galileo says he was encouraged by reports of them to build his own telescope in 1609.



LEONARDO DA VINCI - SOUL CHAKRA ABOVE THE HEAD

Satanic Sarpi's version of these events is more revealing. He wrote on March 16, 1610 that a telescope had been found in Holland two years before, therefore in spring 1608. "Once this was found," wrote Satanic Sarpi, "our mathematician of Padua [Galileo] and some of our other people who are not ignorant of these arts began to use the telescope on celestial bodies, adjusting it and refining it for the purpose...."

Notice: Galileo "and some of our other people."

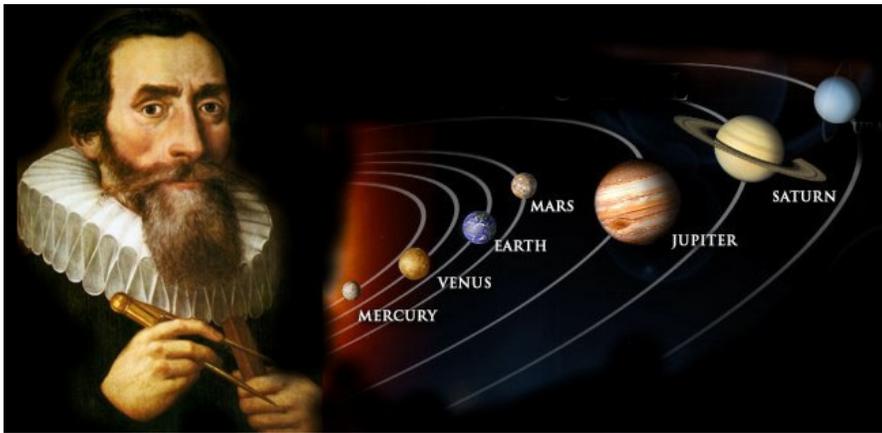
It would appear that the observations were made not from Padua, but from Satanic Sarpi's Servite monastery in Venice. Satanic Sarpi wrote about Galileo as "our mathematician," saying that he had "frequently discussed with him at the time" about the results of the telescopic observations, and did not need to read what Galileo had written about them.

In 1611, a Polish visitor to Venice, Rey, wrote that Galileo had not really been the inventor of the telescope, but that the "adviser, author, and director" of the telescope project had been Father Satanic Sarpi, "who is considered the greatest mathematician here."

In 1597, Johannes Kepler had sent a copy of his new book, *Mysterium Cosmographicum*, to Galileo. This was the work in which Kepler proposed the Platonic solids as the basis for understanding the harmonic ordering of the planetary orbits around the Sun. Galileo thereupon sent a letter to Kepler, explaining that he, too, was a follower of the Copernican or heliocentric view, but that he "had not dared" to come forward with this view because of fear, and preferred to sit on the whole business because of the climate of opinion. Kepler had written back urging Galileo to be confident and to go forward with the struggle for truth, offering to find publishers in Germany if the Italian climate were too oppressive. Galileo did not do this, and refused to comment in detail on Kepler's book. According to Kepler's biographer Max Caspar, in the following years Galileo used material from Kepler in his lectures, but without giving Kepler credit.

Kepler and Galileo were in frequent contact for over 30 years. Kepler commented with benevolent interest – and with subtle polemics – about Galileo’s published works. But Galileo never commented systematically on Kepler’s laws.

In 1609, Kepler published his *Astronomia Nova*, expounding his first and second laws of planetary motion – that the planets move in ellipses of which the Sun is one focus, and that the planets sweep out equal areas in equal times between themselves and the Sun as they revolve.



KEPLER

In Galileo’s *Dialogues on the Two Great World Systems*, published in 1633, Kepler is hardly mentioned, while the discussion centers on Copernicus, with his perfect circle orbits of the planets around the Sun, which had no hope of accounting for the observed positions of the planets. At the end, one of the characters says that he is surprised at Kepler for being so “puerile” as to attribute the tides to the attraction of the Moon.

During the first years of the pontificate of Pope Urban VIII Barberini, Galileo was the semi-official scientist for the pope. But in 1631, when the Swedish Protestant army of Gustavus Adolphus fought its way through Germany, reached the Alps,

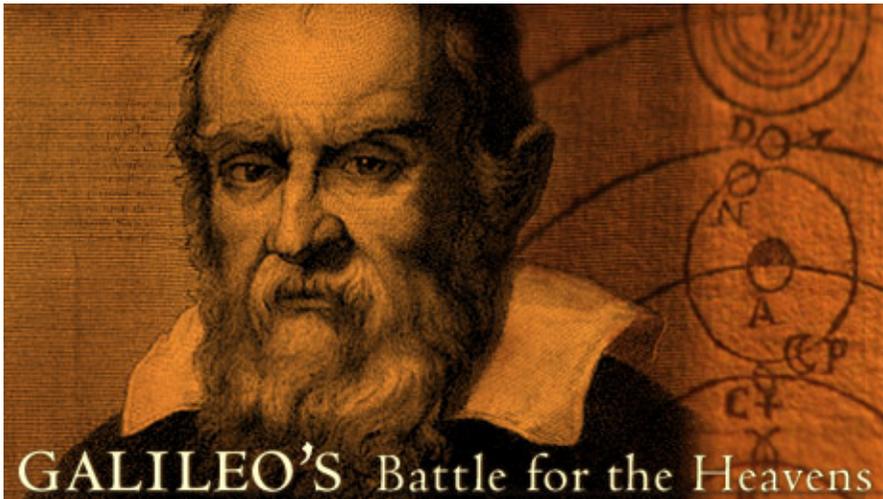
and seemed ready to sweep down on Rome, Urban VIII turned abruptly from a pro-French to a pro-Spanish policy.

The Spanish ascendancy is the backdrop for the fake trial of Galileo carried out by the Dominicans with Jesuit support.

Some years earlier, Satanic Sarpi had forecast that if Galileo went to Rome, the Jesuits and others were likely to “turn ... the question of physics and astronomy into a theological question,” so as to condemn Galileo as “an excommunicated heretic” and force him to “recant all his views on this subject.”

Satanic Sarpi in 1616 seemed to know very well what would happen more than 15 years later, well after his own death. It is evident that the scenario sketched here corresponded to Satanic Sarpi’s own long-term plan.

For Galileo, the trial was one of the greatest public relations successes of all time.



The gesture of repression against Galileo carried out by the Dominicans of Santa Maria Sopra Minerva in Rome established the equation Galileo = modern experimental science struggling against benighted obscurantism.

That equation has stood ever since, and this tragic misunderstanding has had terrible consequences for human thought.

Lost in the brouhaha about Galileo is the more relevant fact that Kepler had been condemned by the Inquisition more than a decade before for more accurate science based on the quantum leap of hypothesis instead of dull dead sense based Satanic Empiricism.

Satanic Sarpi's philosophical and scientific writings were not published until after World War II. These are the *Pensieri*, or Thoughts, and the *Arte di Ben Pensare*, the Art of Thinking Well. Satanic Sarpi's achievement for Satanic Venetian intelligence was to abstract the method of Aristotle from the mass of opinions expressed by Aristotle on this or that particular issue.

In this way, the sense certainty of Empiricism could be kept as the basis of scientific experiments, and Aristotle's embarrassingly outdated views on certain natural phenomena could be jettisoned. This allowed the Satanic Venetians to preserve the essential Aristotle, while attacking exponents of the Aristotelian or Peripatetic school, such as the Jesuits of the Collegio Romano.

These writings by Satanic Sarpi have not been translated, but they are the basis of everything written by Sir Francis Bacon. The Satanic Bacon-Hobbes menage was in close contact with Satanic Sarpi and Micanzio. Satanic Sarpi can also be found in Locke, who took almost 1,000 pages to write what Satanic Sarpi had put down in 30.

In the *Art of Thinking Well*, Satanic Sarpi starts from sense perception and sense certainty.

He suggests that an impression made on our sensory apparatus by outside objects has to be distinguished from those objects. Especially he points to tastes, odors, and

sounds, which he thinks are a matter of our nervous system, not of outside reality. In a different category are ideas of quantity, size, and time, which are objective.

In the same manuscript, Satanic Sarpi lists the immortality of the soul as one on a list of wrong ideas. Satanic Sarpi repeats the argument of Satanic Pomponazzi that since there is no knowledge without sensation, the soul dies with the body. Again, the trademark of the Satanic Venetian Satanic Dead Souls faction.

Galileo's epistemology comes straight from Satanic Sarpi. We can see this in Galileo's 1623 essay *Il Saggiatore*, *The Assayer*. For Galileo, colors, tastes, sounds, smells, are mere words. They exist only for our bodies. Galileo makes the famous comparison of these to tickling. If you brush a feather over the soles of the feet or the armpits of a marble statue, you will not produce a tickle. But if you do this to a human being, you will cause that tickling sensation. So, Galileo says, it is time to get rid of ears, tongues, and noses, and go for shapes, numbers, and motions, and never odors, tastes, and sounds.

From this he proceeds quickly to a reductionist theory of atoms, in which heat is explained as the effect a "fiery minims" of igneous atoms. Galileo's epistemology is identical with that of Satanic Sarpi.

This is what Galileo means when he denies Aristotle to say that the truth is written in the book of nature, and written in mathematical characters. Galileo was a reductionist.

Satanic Sarpi died in 1623, and Galileo's case officer became the Servite monk Fulgenzio Micanzio. After Galileo had been condemned, Micanzio reminded Galileo of the assignment he had received from Satanic Sarpi 20 years earlier: to write a treatise on motion. And by the way, added Micanzio, I have 258 pounds here for you. Later, Micanzio would procure Galileo a pension of 60 scudi per year from the coffers of the Satanic Venetian state.

Galileo responded to Micanzio's orders with the 1638 Discourses on Two New Sciences, Mechanics and Local Motion. Because Galileo had been condemned by the Inquisition, he could not be published anywhere that papal authority was strong. Micanzio therefore arranged for Galileo's book to be printed by the Dutch Elsevir press in Leyden.

In 1634, Micanzio wrote to Galileo that he had been talking to an expert in science and philosophy – called a virtuoso in the parlance of the day – who had commented that although he did not deny Galileo's scientific ability, “the things that you bring are not new, but are already in Kepler.”

Indeed. Galileo wrote back that the correct answer to this virtuoso is that although Galileo and Kepler may sometimes seem to agree about certain astronomical phenomena, “my way of philosophizing is so different from his.” (Nov. 19, 1634).

In letters written in 1640, Galileo threw further light on his own scientific method. Galileo complained that he had been misunderstood: “Against all the reason in the world, I am accused of impugning Peripatetic doctrine, whereas I profess and am certain of observing more religiously the Peripatetic – or, to put it better, Aristotelian – teachings than many others....” (Aug. 24, 1640).

Galileo asserted that he had tried to study phenomena: “that in all natural effects assure me of their existence, their “an sit” [if it be], whereas I gain nothing from their how, their “quomodo.” (June 23, 1640). Some might try to dismiss these admissions as a distortion of Galileo's outlook caused by the crackdown of which he was still a victim, but I would submit that this is the real Galileo talking.

What Satanic Galileo is trying to express here is the same thing Satanic Isaac Newton meant with his infamous “hypotheses non fingo” [I do not fabricate hypotheses] which is the very opposite of the advanced Scientific Method - that of

creating Hypotheses which can then be experimentally proven. Instead Satanic Empiricism was recommended and later also by Sherlock Holmes by Satanic Agent, Sir Arthur Conan Doyle.



NEWTON: A CULTIST KOOK

The next phase of the satanic corruption of science by Venice depends on a rather obscure Cambridge don by the name of Isaac Newton. For the oligarchy, Newton and Galileo are the only two contenders for the honor of being the most influential thinker of their faction since Aristotle himself.

Like Galileo was publicised to take attention from Kepler, Newton was publicised to take attention from the true genius of the age, Leibniz.

The Venetian/British oligarchy praises Newton as the founder of modern science. But, at the same time, they have been unable to keep secret the fact that Newton was a raving irrationalist, a cultist kook.

Among the oligarchs, it was the British economist Lord John Maynard Keynes and a fellow Cambridge graduate who began to open the black box of Newton's real character.

Was Newton the first and greatest of the modern scientists, the practitioner of cold and untingered reason? No, said Keynes, Newton was not the first of the Age of Reason. He was the last of the magicians, the last of the Satanic Babylonians and Sumerians, the last wonderful child to whom the Magi could do sincere and appropriate homage.

Keynes based his view on the contents of a box. What was in the box? The box contained papers which Newton had packed up when he left Cambridge for London in 1696, ending his Cambridge career and beginning his new life in London as member and president of the British Royal Society, director of the mint, resident magus of the new Slave Trading, Drug Running, Bankstering Roman/Venetian/British Empire.

Inside the box were manuscripts and papers totaling some 1.2 million words. After Newton's death, Bishop Horsley was asked to inspect the box, with a view to publication, but when he saw the contents, he recoiled in horror and slammed the lid. A century passed. Newton's nineteenth-century biographer, Sir David Brewster, looked into the box. He decided to save Newton's reputation by printing a few selections, but he falsified the rest with straight fibbing, as Keynes says. The box became known as the Portsmouth Papers. A few mathematical papers were given to Cambridge in 1888. In 1936, the current owner, Lord Lymington, needed money, so he had the rest auctioned off. Keynes bought as many as he could, but other papers were scattered from Jerusalem to America.

As Keynes points out, Newton was a suspicious, paranoid, unstable personality. In 1692, Newton had a nervous breakdown and never regained his former consistency of mind.

Alchemy is a hidden meditation technique taught in Energy Enhancement to remove Energy Blockages, to contact the Chakras above the Head, the energies of God, but idiots like

Newton used chemicals like mercury which they heated and inhaled - driving them mad.

Pepys and Locke thought that he had become deranged. Newton emerged from his breakdown slightly “gaga.” As Keynes stresses, Newton had the Venetian disease of homosexuality “which follows satanists like a stench”, “was wholly aloof from women,” although he had some close young male friends. He once angrily accused John Locke of trying to embroil him with women.

In the past decades, the lid of the box has been partially and grudgingly opened by the Anglophile scholars who are the keepers of the Newton myth. What can we see inside the box?

First, Newton was a supporter of the Arian heresy. He denied and attacked the Holy Trinity, and therefore also the Filioque and the concept of Imago Viva Dei.

Keynes thought that Newton was “a Judaic monotheist of the school of Maimonides,” which suggests that he was a Cabalist. For Newton, to worship Christ as God was idolatry and a mortal sin. Even in the Church of England, Newton had to keep these views secret or face ostracism.

Newton’s real interest was not mathematics or astronomy. It was alchemy. His laboratory at Trinity College, Cambridge was fitted out for alchemy. Here, his friends said, the fires never went out during six weeks of the spring and six weeks of the autumn. And what is alchemy? What kind of research was Newton doing? Newton owned all six heavy quarto volumes of Ashmole. His sources were books like the “Theatrum Chemicum Britannicum” of Elias Ashmole, the Rosicrucian leader of British speculative Freemasonry.



NEWTON THE ALCHEMIST WHO POISONED HIMSELF WITH MERCURY VAPOUR

The goal of the alchemists was the quest for the mythical philosopher's stone, which would permit the alchemist to transmute lead and other base metals into gold. The alchemists hoped the philosopher's stone would give them other magical powers, such as rejuvenation and eternal youth. Alchemy is hidden techniques of meditation which we teach in Energy Enhancement.

Newton used Alchemy for Chemistry and poisoned himself with heavy metal vapour.

Alchemy also involved the relations between the astrological influences of the planets and the behavior of chemicals. One treatise that dealt with these issues was the “Metamorphosis of the Planets.” Since the planet Jupiter had precedence among the planets, it also occupied a privileged position among the reagents of alchemy. Newton expressed this with a picture he drew of Jupiter Enthroned on the obverse of the title page of this book.

What were Newton’s findings? Let him speak for himself: “Concerning Magnesia of the green Lion. It is called Prometheus & the Chameleon. Also Androgyne, and virgin verdant earth in which the Sun has never cast its rays although he is its father and the moon its mother. Also common mercury, dew of heaven which makes the earth fertile, nitre of the wise. *Instructio de arbore solari*. It is the Saturnine stone.” This would appear to have been written in the 1670s. A sample from the 1690s: “Now this green earth is the Green Ladies of B. Valentine the beautifully green Venus and the green Venereal emerald and green earth of Snyders with which he fed his lunary Mercury and by virtue of which Diana was to bring forth children and out of which saith Ripley the blood of the green Lyon is drawn in the beginning of the work.”

During the 1680s Newton also composed a series of aphorisms of alchemy, the sixth of which reads as follows: “The young new born king is nourished in a bigger heat with milk drawn by destillation from the putrefied matter of the second work. With this milk he must be imbibed seven times to putrefy him sufficiently and then docted to the white and red, and in passing to the red he must be imbibed with a little red oil to fortify the solary nature and make the red stone more fluxible. And this may be called the third work. The first goes on no further than to putrefaction, the second goes to the white and the third to the red.” (Westfall, pp. 292, 293, 358).

And so it goes for more than a million words, with Green Lions, Androgynes, male and female principles, Pan and Osiris. Truly it has been said that Newton had probed the

literature of alchemy as it had never been probed before or since, all during the time he was supposedly writing his *Principia Mathematica*. In addition, he drew up plans for King Solomon's Temple, and later a chronology of Biblical events which foreshortened that history by cutting out several hundred years.

NO NEWTON'S "DISCOVERIES"

And what about Newton's supposed discoveries? Upon closer scrutiny, it turns out that he had no discoveries.

Take, for example, Newton's alleged law of universal gravitation, which states that the force of attraction of two point masses is equal to the product of the two masses divided by the square of the distance between them, times a constant. This is Newton's so-called inverse square law.

It has long been known that this was not really a new discovery, but rather derived by some tinkering from Kepler's Third Law.

Kepler had established that the cube of a planet's distance from the Sun divided by the square of its year always equaled a constant. By supplementing this with Huygens's formula for centrifugal acceleration and making some substitutions, you can obtain the inverse square relationship. This issue is settled in the appendices to *The Science of Christian Economy* [by Lyndon LaRouche, Washington, D.C.: Schiller Institute, 1991].

By opening the lid of the box, we find that Newton himself confesses, in an unpublished note, that his great achievement was cribbed from Kepler. Newton wrote: "...I began to think of gravity extending to the Orb of the Moon and (having found out how to estimate the force with which a globe revolving presses the surface of a sphere) from Kepler's rule of the periodical times of the Planets being in sesquialterate proportion of their distances from the center of their Orbs, I deduced that the forces which keep the Planets in their Orbs

must be reciprocally as the squares of their distances from the centers about which they revolve....” (Westfall, 143).

Newton “arrived at the inverse square relation by substituting Kepler’s Third Law into Huygens’s recently published formula for centrifugal force” (Westfall, 402). Hooke and Sir Christopher Wren claimed to have done exactly the same thing at about the same time.

Newton’s love of alchemy and magic surfaces as the basis of his outlook, including in his supposed scientific writings. In his “Opticks,” he asks, “Have not the small particles of bodies certain powers, virtues, or forces, by which they act at a distance.... How those attractions may be performed, I do not here consider. What I call attraction may be performed by Impulse, or some other means unknown to me.” This is Newton’s notion of gravity as action at a distance, which Leibniz rightly mocked as black magic.

Newton’s system was unable to describe anything beyond the interaction of two bodies, and supposed an entropic universe that would have wound down like clockwork if not periodically re-wound. Newton also wrote of an electric spirit, and of a mysterious medium he called the ether later disproved by Michaelson and Morley.

Then there is the story of Newton’s invention of the calculus. In reality, Newton never in his entire life described a calculus. He never had one. What he cooked up was a theory of so-called fluxions and infinite series.

This was not a calculus and quickly sank into oblivion when it was published nine years after Newton’s death.

By 1710, European scientists had been working with Leibniz’s calculus for several decades.

It was about that time that Newton and the British Royal Society launched their campaign to claim that Newton had actually invented the calculus in 1671, although for some

strange reason he had never said anything about it in public print during a period of 30 years.

This was supplemented by a second allegation, that Leibniz was a plagiarist who had copied his calculus from Newton after some conversations and letters exchanged between the two during the 1670s.

These slanders against Leibniz were written up by Newton and put forward in 1715 as the official verdict of the British Royal Society. The same line was churned out by scurrilous hack writers directed by Newton.

But scientists in continental Europe, and especially the decisive French Academy of Sciences, were not at all convinced by Newton's case. Newton's reputation on the continent was at best modest, and certainly not exalted. There was resistance against Newton in England, with a hard core of 20-25% of anti-Newton feeling within the Royal Society itself. How then did the current myth of Newton the scientist originate?

NEWTON: THE APOTHEOSIS OF A CHARLATAN

The apotheosis of Newton was arranged by Satanic Agent Antonio Conti of Venice, the center of our third grouping of the dead souls faction. In order to create the myth of Newton as the great modern scientist, Conti was obliged to do what might well have been considered impossible at the time: to create a pro-British party in France. Conti succeeded, and stands as the founder of the Enlightenment, otherwise understood as the network of French Anglophiles.

Those Frenchmen who were degraded enough to become Anglophiles would also be degraded enough to become Newtonians, and vice versa. The British had no network in Paris that could make this happen, but the Satanic Venetians did, thanks most recently to the work of such figures as Montaigne and Pierre Bayle.

What the British could never have done, the Satanic Venetians accomplished for the greater glory of the Anglo- Satanic Venetian Party.

Born in Padua in 1677, like Contarini and Giorgi, Satanic Conti was a patrician, a member of the Satanic Venetian nobility. He was a defrocked priest who had joined the Oratorian order, but then left it to pursue literary and scientific interests, including Galileo and Descartes. Conti was still an abbot. In 1713, Conti arrived in Paris. This was at the time of the Peace of Utrecht, the end of the long and very bitter War of the Spanish Succession, in which the British, the Dutch, and their allies had invaded, defeated, and weakened the France of Jean-Baptiste Colbert. Louis XIV had only two more years to live, after which the throne would go to a regent of the House of Orleans.

In Paris, Conti built up a network centering on the philosopher Nicholas de Malebranche. He also worked closely with Bernard Le Bovier de Fontenelle, the permanent secretary of the French Academy of Sciences, still the premier research center in Europe. Conti saw immediately that Fontenelle was a follower of Giordano Bruno of the Ridotto Morosini.

Conti became a celebrity in Paris, but he soon announced that he was growing tired of Descartes, the dominant figure on the French intellectual scene. Conti began telling the Paris salons that he was turning more and more to Newton and Leibniz.

He began to call attention to the polemic between Newton and Leibniz. What a shame that these two eminent scientists were fighting each other! Perhaps these two outlooks could be reconciled. That would take a tactful mediator, an experienced man of the world. Since the English and the German scientists were at war, who better than an Italian, a Satanic Venetian, to come forward as mediator?

Perhaps such a subtle Satanic Venetian could find a way to settle this nasty dispute about the calculus and propose a compromise platform for physics.

A solar eclipse was in the offing, and Conti organized a group of French astronomers to go to London and observe it – probably the London fog would be helpful.

With Conti's help these Frenchmen would be turned, bribed, made members of the Royal Society, and when they got back to France, they would become the first French Anglophiles of the eighteenth century French Enlightenment. Before leaving Paris, Conti, with classical Satanic Venetian duplicity, wrote a very friendly letter to Leibniz, introducing himself as a supporter of Leibniz's philosophy.

Conti claimed that he was going to London as a supporter of Leibniz, who would defend his cause in London just as he had done in Paris. By 1715, Leibniz's political perspectives were very grim, since his patroness, Sophie of Hanover, had died in May 1714. Leibniz was not going to become prime minister of England, because the new British king was Georg Ludwig of Hanover, King George I.

When Conti got to London, he began to act as a diabolical agent provocateur.

Turning on his magnetism, he charmed Newton. Newton was impressed by his guest and began to let his hair down. Conti told Newton that he had been trained as a Cartesian. "I was myself, when young, a Cartesian," said the sage wistfully, and then added that Cartesian philosophy was nothing but a "tissue of hypotheses," and of course Newton would never tolerate hypotheses.

Newton confessed that he had understood nothing of his first astronomy book, after which he tried a trigonometry book with equal failure. But he could understand Descartes very well. With the ground thus prepared, Conti was soon a regular

dinner guest at Newton's house. He seems to have dined with Newton on the average three evenings per week.

Conti also had extensive contacts with Edmond Halley, with Newton's anti-Trinitarian parish priest Samuel Clarke, and other self-styled scientists. Conti also became friendly with Princess Caroline, the Princess of Wales, who had been an ally of Leibniz. Conti became very popular at the British court, and by November 1715 he was inducted by Newton as a member of the Royal Society.

Conti understood that Newton, kook that he was, represented the ideal cult figure for a new obscurantist concoction of deductive - inductive pseudo mathematical formalism masquerading as science.

Thanks to the Satanic Venetians, Italy had Galileo, and France had Descartes.

Conti might have considered concocting a pseudo scientific ideology for the English based on Descartes, but that clearly would not do, since Venice desired to use England above all as a tool to tear down France with endless wars.

Venice needed an English Galileo, and Conti provided the intrigue and the public relations needed to produce one, in a way not so different from Paolo Satanic Sarpi had with Galileo a century before.



IQ200 LIEBNIZ

THE LIEBNIZ-NEWTON SCAM

Conti received a letter from Leibniz repeating that Newton had never mastered the calculus, and attacking Newton for his occult notion of gravitation, his insistence on the existence of atoms and the void, and his inductive method.

Whenever Conti got a letter from Leibniz, he would show it to Newton, to stoke the fires of Newton's obsessive rage to destroy Leibniz.

During this time, Newton's friend Samuel Clarke began an exchange of letters with Leibniz about these and related issues. (Voltaire later remarked of Clarke that he would have made an ideal Archbishop of Canterbury if only he had been a Christian.) Leibniz wrote that natural religion itself was decaying in England, where many believe human souls to be material, and others view God as a corporeal being.

Newton said that space is an organ, which God uses to perceive things. Newton and his followers also had a very odd opinion concerning the work of God. According to their doctrine, “God Almighty wants to wind up his watch from time to time; otherwise, it would cease to move. He had not, it seems, sufficient foresight to make it a perpetual motion.”

This gave rise to the Leibniz-Clarke correspondence, in which we can also see the hand of Conti. By now, the chameleon Conti was a total partisan of Newton’s line of atoms and the void, the axioms of Newtonian absolute space. “If there were no void,” wrote Conti, “all bodies would be equally heavy and the comets could not pass through heavenly spaces.... M. Leibniz has written his speech to Princess [Caroline], and he presents the world not as it is, but as it could be.” (Badaloni, Antonio Conti, 63).

Newton tried to get the ambassadors of the London diplomatic corps to review his old manuscripts and letters, hoping they would endorse the finding of the Royal Society that Leibniz had plagiarized his calculus.

Leibniz had pointed out that the Royal Society had stacked the evidence.

Conti used this matter to turn George I more and more against Leibniz.

Conti organized the Baron von Kilmansegge, the Hanoverian minister and husband of George I’s mistress, to take the position that the review of documents would not be enough; the only way to decide the Leibniz-Newton controversy was through a direct exchange of letters between the two.

King George agreed with this. Conti encouraged Newton to make a full reply to Leibniz, so that both letters could be shown to the king.

When he heard Newton’s version, the king indicated that Newton’s facts would be hard for Leibniz to answer.

Conti tried to convince Leibniz to accept the 1715 verdict of the Royal Society which had given credit for the calculus to Newton. In return, to sweeten this galling proposal, Conti generously conceded that Leibniz's calculus was easier to use and more widely accepted.

By now Leibniz was well aware that he was dealing with an enemy operative, but Leibniz died on Nov. 4, 1716, a few days before Conti arrived in Hanover to meet him - **the Borgia Cup!!**

Newton received word of the death of his great antagonist through a letter from Cunti.

CONTI'S DEPLOYMENT TO FRANCE



Chiara Varotari - Ritratto di Schinella de' Conti - olio su tela - Musei Civici, Padova

Thanks to Conti's intervention as agent provocateur, Newton had received immense publicity and had become a kind of *succes de scandale*. The direct exchange mandated by George I suggested to some an equivalence of Leibniz and Newton. But now Conti's most important work was just beginning.

Leibniz was still held in high regard in all of continental Europe, and the power of France was still immense. Conti and the Satanic Venetians wished to destroy both. In the Leibniz-Newton contest, Conti had observed that while the English sided with Newton and the Germans with Leibniz, the French, Italians, Dutch, and other continentals wavered, but still had great sympathy for Leibniz.

These powers would be the decisive swing factors in the epistemological war. In particular, the attitude which prevailed in France, the greatest European power, would be decisive. Conti now sought to deliver above all France, plus Italy, into the Newtonian camp.

Conti was in London between 1715 and 1718. His mission to France lasted from 1718 through 1726. Its result will be called the French Enlightenment, *L'Age des Lumieres*. The first components activated by Conti for the new Newtonian party in France were the school and followers of Malebranche, who died in 1715. The Malebranchistes first accepted Newton's *Opticks*, and claimed to have duplicated Newton's experiments, something no Frenchman had done until this time.

Here Conti was mobilizing the Malebranche network he had assembled before going to London.

Conti used his friendship with Fontenelle, the secretary of the French Academy of Sciences, to secure his benevolent neutrality regarding Newton. Conti's other friends included Mairan, Reaumur, Freret, and Desmolets.

During the late teens and '20s in Paris, an important salon met at the Hotel de Rohan, the residence of one of the greatest

families of the French nobility. This family was aligned with Venice; later, we will find the Cardinal-Prince de Rohan as the sponsor of the Satanic Venetian agent Count Cagliostro.



CAGLIOSTRO

The librarian at the Hotel de Rohan was a certain Abbe Oliva. Oliva presided over a Satanic Venetian-style *conversazione* attended by Conti, his Parisian friends, and numerous Italians. This was already a circle of freethinkers and satanic sexual libertines.

In retrospect, the best known of the participants was Charles-Louis de Secondat, Baron de la Brede et de Montesquieu. Montesquieu, before Voltaire, Rousseau, and the Encyclopedia, was the first important figure of the French Enlightenment – more respectable than Voltaire and Rousseau – and the leading theoretician of political institutions. Conti met Montesquieu at the Hotel de Rohan, and at another salon, the Club de l'Entresol.

Later, when Conti had returned to Venice, Montesquieu came to visit him there, staying a month. Montesquieu became a paid agent for Conti.

Montesquieu's major work is *The Spirit of the Laws*, published in 1748. This is a work of decidedly Satanic Venetian flavor, with republic, monarchy, and despotism as the three forms of government, and a separation of powers doctrine.

Montesquieu appears to have taken many of his ideas from Conti, who wrote a profile of France called "Historical and Political Discourse on the State of France between 1700 and 1730." In his treatise, Montesquieu points out that France has an independent judiciary, the parlements, which became a main focus for Anglo-Satanic Venetian destabilization efforts in order to create the French Revolution.

Montesquieu raises the theme of Anglophilia, praising Britain's allegedly constitutional monarchy as the ideal form. With this, the pro-British bent of Conti's Enlightenment philosophes is established. The ground is being prepared for Newton.

ANOTHER CONTI SECRET AGENT: VOLTAIRE

One of Conti's other friends from the Hotel de Rohan was a Jesuit called Tournemine, who was also a high school teacher. One of his most incorrigible pupils had been a libertine jailbird named Francois-Marie Arouet, who was so stubborn and headstrong that his parents had always called him "le volontaire," meaning self-willed. Gradually this was shortened to Voltaire.

French literary historians are instinctively not friendly to the idea that the most famous Frenchman was a Satanic Venetian agent working for Conti, but the proof is convincing.

Voltaire knew both Conti personally and Conti's works. Conti is referred to a number of times in Voltaire's letters. In one letter, Voltaire admiringly shares an anecdote about Conti and Newton. Voltaire asks, should we try to find the proof of the existence of God in an algebraic formula on one of the most obscure points in dynamics? He cites Conti in a similar situation with Newton: "You're about to get angry with me," says Conti to Newton, "but I don't care." I agree with Conti, says Voltaire, that all geometry can give us are about forty useful theorems. Beyond that, it's nothing more than a fascinating subject, provided you don't let metaphysics creep in.



VOLTAIRE

Voltaire also relates Conti's version of the alleged Spanish conspiracy against Venice in 1618, which was supposedly masterminded by the Spanish ambassador to Venice, Count Bedmar. Conti's collected works and one of his tragedies are in Voltaire's library, preserved at the Hermitage in St. Petersburg.

The book which made Voltaire famous was his Philosophical Letters, sometimes called the English letters, because they are devoted to the exaltation of all things British, which Voltaire had observed during his three years in London.

In the essay on Shakespeare, Voltaire writes that Shakespeare is considered the Corneille of England.

This is a quote from Conti, taken from the head note to Conti's tragedy *Giulio Cesare*, which had been published in Paris in 1726. Voltaire's view of Shakespeare as sometimes inspired, but barbarous and "crazy" for not respecting French theatrical conventions, is close to Conti's own practice. We can thus associate Conti with Voltaire's first important breakthrough, and the point where Anglophilia becomes Anglomania in France.

But most important, Voltaire's *Philosophical Letters* center on the praise of Newton.

After chapters on Satanic Francis Bacon and Satanic John Locke, there are four chapters on Newton, the guts of the work. For Voltaire, Newton was the first discoverer of the calculus, the dismantler of the entire Cartesian system. His "sublime ideas" and discoveries have given him "the most universal reputation." Voltaire also translated Newton directly, and published *Elements of Newtonian Philosophy*.

The *Philosophical Letters* were condemned and Voltaire had to hide in the libertine underground for a time. He began to work on another book, *The Century of Louis XIV*. The idea here was simple: to exalt Louis XIV as a means of attacking the current king, Louis XV, by comparison.

This was an idea that we can also find in Conti's manuscripts. Louis XV was, of course, a main target of the Satanic Anglo-Venetians prior to the British/Venetian created French Revolution.

In 1759, Voltaire published his anti Leibnizian short novel *Candide*, a distillation of Satanic Venetian cultural pessimism expressed as a raving attack on Leibniz, through the vicious caricature Dr. Pangloss. Toward the end of the story, *Candide* asks Pangloss: "Tell me, my dear Pangloss, when you were hanged, dissected, cruelly beaten, and forced to row in a galley, did you still think that everything was for the best in

this world?” “I still hold my original opinions, replied Pangloss, because after all, I’m a philosopher, and it wouldn’t be proper for me to recant, since Leibniz cannot be wrong, and since pre-established harmony is the most beautiful thing in the world, along with the plenum and subtle matter.”

When Candide visits Venice, he meets Senator Pococurante, whom he considers a great genius because everything bores him and nothing pleases him. Senator Pococurante is clearly a figure of Abbot Antonio Conti. Conti was, we must remember, the man whom Voltaire quoted admiringly in his letter cited above telling Newton that he didn’t care – *non me ne curo*, perhaps, in Italian. Among Conti’s masks was certainly that of worldly boredom.

Conti later translated one of Voltaire’s plays, *Merope*, into Italian.



CONTI AND THE FRENCH REVOLUTION

Conti's discussion of the supremacy of the sense of touch when it comes to sense certainty is echoed in the writing of the philosopher Condillac. Echoes of Conti have been found by some in Diderot's Jacques the Fatalist. And then there is Buffon, who published Newton's book on fluxions in French.

More research is likely to demonstrate that most of the ideas of the French Enlightenment - a preparation for the French Revolution - come from the Satanic Venetian Conti.

The creation of a pro- Newton, anti-Leibniz party of French Anglomaniacs was a decisive contribution to the defeat of France in the mid-century world war we call the War of the Austrian Succession and the Seven Years' War, which gave Britain world naval supremacy, and world domination.

Conti's work was also the basis for the later unleashing of the French Revolution.

In the epistemological war, the French Newtonians were indispensable for the worldwide consolidation of the Newton myth.

In Italy, there were paid Satanic Venetian writers like Voltaire's friend Algarotti, the author of a book of Newtonian Philosophy for Ladies. Newton's ideas were also spread by Abbot Guido Grandi, who labored to rehabilitate Galileo inside the Catholic Church.

Another Italian intellectual in Conti's orbit was Gimbattista Vico, later popularized by Benedetto Croce.

The main point is that only with the help of Venice could the senile cultist kook Newton attain worldwide respect.

Conti was active until mid-century; he died in 1749. In Venice he became the central figure of a salon that was the worthy heir of Ridotto Morosini. This was the sinister coven that called itself the philosophical happy conversazione (“la conversazione filosofica e felice”) that gathered patrician families like the Emo, the Nani, the Querini, the Memmo, and the Giustinian. These were libertines, freethinkers, Ritual Satanists.



We are moving toward the world portrayed in Schiller's Geisterseher - THE GHOST SEER.

After Conti's death, the dominant figure was Andrea Memmo, one of the leaders of European Freemasonry.

An agent shared by Memmo with the Morosini family was one Giacomo Casanova, a homosexual who was backed up by a network of lesbians.



Satanic Venetian oligarchs turned to homosexuality and sodomy - "the Venetian way of loving" - because their Satanic Religion demands it, because of their obsession with keeping the family fortune intact by guaranteeing that there would only be one heir to inherit it; by this time more than two thirds of male nobles, and an even higher percentage of female nobles, never married. A degeneration of Venice caused by Satanism.

Here we have the roots of Henry Kissinger's modern Homintern.

Casanova's main task was to target the French King Louis XV through his sexual appetites.

There is good reason to believe that Louis XV's foreign minister De Bernis, who carried out the diplomatic revolution of 1756, was an agent of Casanova. One may speculate that Casanova's networks had something to do with the approximately 25 assassination plots against Louis XV.

Finally, Louis XV banned Casanova from France with a lettre de cachet.

Another agent of this group was Count Cagliostro, a charlatan and mountebank whose targets were Louis XVI and Marie Antoinette, whom he destabilized through their own folly in the celebrated Queen's Necklace Affair of 1785.

Cagliostro was able to make Louis and especially Marie Antoinette personally hated, a necessary precondition for mass insurrection against them.

Emperor Napoleon later said that this operation by Cagliostro had marked the opening phase of the French Revolution of 1789.

CONTI'S LEGACY OF EVIL

Another member of the Conti-Memmo conversazione was Giammaria Ortes, who had been taught Newton by Conti personally, as well as by Grandi. Ortes was another defrocked cleric operating as an abbot. Ortes is the author of a manual of Newtonian physics for young aristocrats, including a chapter on electricity which manages to avoid Benjamin Franklin, in the same way that Galileo avoided Kepler.

Ortes carried out Conti's program of applying Newtonian methods to the social sciences. This meant that everything had to be expressed in numbers. Ortes was like the constipated mathematician who worked his problem out with a pencil. He produced a calculus on the value of opinions, a calculus of the pleasures and pains of human life, a calculus of the truth of history.

This is the model for Prime Minister and Head of the Slave Trading, drug Running British East India Company Lord Shelburne's Head of MI6, creator of the French Revolution, Satanic Jeremy Bentham's felicific or hedonistic calculus and other writings.



SATANIST AND HEAD OF MI6 BENTHAM, CREATOR OF THE ALL SEEING EYE, "Wreathed in Flame", PANOPTICON,

...

HIS BODY STUFFED, HEAD CUT OFF AND PLACED UNDERNEATH HIS CHAIR, ON DISPLAY IN A PUB IN LONDON

For example, Bentham said that, "Free Love" included homosexuality, pederasty, and bestiality.

Using these methods, Ortes posited an absolute upper limit for the human population of the Earth, which he set at one billion.

This is the first appearance of carrying capacity. Ortes was adamant that there had never been and could never be an improvement in the living standard of the Earth's human population beyond one billion.

He argued that government intervention, as supported by the Cammeralist school of Colbert, Franklin, and others, could never do any good

- a theory destroyed by scientific advances which can increase the carrying capacity to infinity
- currently the Earth supports 7 billions.

Satanic Ortes provided all of the idea-content that is found in Thomas Malthus, Adam Smith, Jeremy Bentham, the two Mills, and the rest of Lord Shelburne's school of Satanic British philosophical radicalism in the time after 1775 also the current infiltraitored "Green" parties, "For Gaia".

Conti has left a commentary on Plato's Parmenides, which he interprets as Plato's self-criticism for the mistake of having made ideas themselves the object of philosophical attention. In his Treatise on Ideas, Conti writes that the fundamental error of Plato is to attribute real existence to human ideas. All our ideas come from sense perceptions, says Satanic Conti.



**PLATO - SOUL EXISTS IN THE
CHAKRAS ABOVE THE HEAD**

For a man
to conquer **himself**
is the first and noblest
of all victories.

-**Plato**

In 1735 Satanic Conti was denounced to the Venetian Inquisition because of his reported religious ideas. Conti was accused of denying the existence of God. True to his factional pedigree, Conti also denied the immortality of the human soul.

Satanic Conti reportedly said of the soul: "Since it is united with a material body and mixed up with matter, the soul perished with the body itself." - the epitome of Satanism where humanity is reduced to the level of a beast instead of, "Imago Dei".

Conti got off with the help of his patrician aristocrat friends.

Satanic Conti commented that God is something that we cannot know about, and jokingly confessed his ignorance. He even compared himself to Cardinal Nicolaus of Cusa who headed the Scientific Renaissance.

Conti described his own atheism as merely a version of the *docta ignorantia* [referring to Cusa's book by the same name, *On Learned Ignorance*]. But this Satanic Senatore Pococurante still lives in every classroom where Newton is taught.

Surely it is time for an epistemological revolution to roll back the Satanic Venetian frauds of Galileo, Newton, and Lord Bertrand Russell.

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All religions are created and Satanism, Luciferianism, the Cult of Apollo, Dionysus, Isis, Horus, Osiris have been created to control the upper levels of society for the real owners for thousands of years. Because if you believe the precepts of a Satanic Religion, you will believe anything, do anything for the compartmentalised top of the Hierarchy.

**THESE RITUALS DEFINE SATANISM..
RITUAL SEX, RITUAL HOMOSEXUALITY,
RITUAL PEDERASTY, RITUAL DRUGS,
RITUAL HUMAN SACRIFICE, RITUAL
CANNIBALISM, RITUAL CASTRATION**



[http://www.energyenhancement.org/SATANISM-RITUALS-
DEFINE-SATANISM-RITUAL-SEX-RITUAL-DRUGS-
RITUAL-HUMAN-SACRIFICE-RITUAL-CANNIBALISM-
RITUAL-CASTRATION-CYBELE-ATTIS.htm](http://www.energyenhancement.org/SATANISM-RITUALS-DEFINE-SATANISM-RITUAL-SEX-RITUAL-DRUGS-RITUAL-HUMAN-SACRIFICE-RITUAL-CANNIBALISM-RITUAL-CASTRATION-CYBELE-ATTIS.htm)

If a member of the Elite partakes of the normal Satanic Rituals - extant for thousands of years - designed to reduce people to the level of a psychopathic beast - of animal and human sacrifice rituals, canibalism rituals, drug rituals,

sex rituals,

homosexual sodomy rituals,

pederasty rituals,

torture rituals,

the castration rituals of Cybele and Attis

- and then you have your pictures and videos taken of you doing it, then you tend to follow orders!!



ELITE HUMAN SACRIFICE AT BOHEMIAN GROVE

In opposition to Psychopathic Satanism, from the time of the Patanjali, Buddha and Jesus Christ, meditation has been specified by all Spiritual Masters as a method of accessing good spiritual energies which develop good

psychic powers, evolutionary kundalini energy, Samadhi and Samyama.

ENERGY ENHANCEMENT Meditation will expand the Heart Center of empathy and conscience.

ENERGY ENHANCEMENT Meditation will increase your Intellect, your IQ.

ENERGY ENHANCEMENT Meditation will increase your Intuition.

ENERGY ENHANCEMENT Meditation will increase your Psychic Powers.

ENERGY ENHANCEMENT Meditation will increase your health.

ENERGY ENHANCEMENT Meditation will increase your courage, especially the courage written about by JRR Tolkien - to just walk into Mordor and burn the Ring!!

ENERGY ENHANCEMENT WILL SPEED UP THE PROCESS!!



FORTITUDE, COURAGE, BY SANDRO BOTTICELLI

J.R.R. Tolkien identified in his 1936 lecture on the Finn "Beowulf: The Monsters and the Critics" a "Northern 'theory of courage'"—the heroic or "virtuous pagan" insistence to do the right thing even in the face of certain defeat without promise of reward or salvation:

"Enlightenment is the free will ONLY to do the right and good thing" - Satchidanand

“ It is the strength of the northern mythological imagination that it faced this problem, put the Monsters in the Centre,

gave them victory but no honor,

and found a potent and terrible solution in Naked Will and Courage.

'As a working theory absolutely impregnable.'

So potent is it, that while the older southern imagination has faded forever into literary ornament, the northern has power, .. to revive its spirit even in our own times.

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**Energy Enhanced Powerful
individuals, capable of producing
change, to change the World.**

**AND THIS WORLD NEEDS
CHANGE!!**



**KEEP
CALM
AND
BURY HEAD
IN SAND**



**DON'T BE AN OSTRICH!! OR PUT YOUR HEAD WHERE
THE SUN DON'T SHINE!!**

**THERE HAS ALWAYS BEEN A FIGHT BETWEEN GOOD
AND EVIL**

**ENERGY ENHANCEMENT CAN PRODUCE THAT CHANGE
IN YOU**

**AND IN THE WORLD!! AND MAKE YOU THAT POTENT
SOURCE OF CHANGE**

"LOVE IS THE ENERGY OF CHANGE" – SATCHIDANAND

The True History of Today's Scientific and Economic Empiricism by Michael Kirsch

March 11, 2010 • 1:56 PM

**Satanic Secret Agents, Aristotle;
Contarini, Pomponazzi and Giorgi;
Sarpi, Galileo and Kepler; Conti,
Newton and their Nemesis, Leibniz -
The Satanic Corruption of Science by
the Satanic, Slave Trading, Drug
Running, Bankster run Venetian
Empire**

**"I LIKE TO BE A CONSPIRACY
THEORIST BECAUSE THE PEOPLE
WHO DON'T ASK QUESTIONS, -
THEY'RE KIND OF DUMB" - THE
FOOD BABE**

**THE POLICY OF POVERTY
CREATES CONTROL!!**

If citizens knew that between Isaac Newton, Rene Descartes, and Galileo Galilei, not a single discovery was ever made, then the illusion that there is a basis for believing in Adam Smith's "self-correction of the market," a self-evident value of money, the validity of statistical methods, and any necessity for London and Wall Street, would instantly vanish. But, if citizens further knew of the unique mind and fight which was the life of Gottfried Leibniz, then, the Venetian monetary system's long campaign against the Westphalian era of the nation-state could be halted as if at the coroner's door, in its present, and impossible desire to rule over a much-reduced world population, and human discovery would be unbound.

So it happened, that after the day Gottfried Leibniz died, a Venetian priest led Europe by the hand into bed with Isaac Newton, corrupting all of its future conceptions. Venice's fight to beat back the 15th century Renaissance is long, but only here do we find the clarity to make sense of modern civilization's struggle against a monetary system which is currently gutting the U.S. of its last vestiges of creativity in economics and using its own agent as President for that goal, a clarity, which has otherwise been intentionally obscured by that monetary system itself.

All of this will be rendered transparent for you, the reader; and with the understanding gained here, there is no place for the enemies of our nation to hide, if citizens would merely point out facts unpleasant to their controllers and benefactors attempting to drive civilization further along its present dark age plunge.

Citizens of our republic, the authority by which you fight the consequences of today's death of the global monetary system, lies in a tale, which these pages tell, of Leibniz's war with Venice, one which characterized the issues still, and now determining the fight for civilization. And it with this authority, that the minds of our time can stand with confidence behind the actions which must be taken to advance mankind's present condition toward its proper place in the

universe, through a realization of the inner meaning of science and discovery.

Thus, let the veil be lifted, and the following dramatic tale unfolded, exposing the truth that the universe, and your mind, does not work the way the financial markets, and the global monetary system, would need it to work, in order to continue their political power.

There is a cancer growing on world history – the cancer of Satanism.



Introduction:

In the 11th and 12th centuries A.D., Venice became the seat of an international monetary system, governing through usury, and creating debtors through the Crusades to gain trade dominance of the world. Venice continued to spread until its evil system of usurious lending, banking, and wars, collapsed into the bloody black death of the 14th century. Civilized society arose from that bestial hell unleashed by Venice in the form of the 15th century movement of the sovereign nation-state, and Venice's system became weaker and weaker. Sovereign nations acted outside of the remains of Venice's empire, and made laws in accord with the well-being of their subjects, the expression of the principle of the common good. Man's realization of his own creative nature spread more rapidly than any operations Venice could run to break up the growing nation-state movement, and much to its woe, nations inevitably raised the standard of physical productivity and creativity; by the middle of the 16th century, factionalization diminished Venice's power further.

It was in this way, that in the closing decades of the 16th century, a faction emerged among leading Venetian families, a party called the "Giovani" (the youthful), and with the resolve to move Venice in a new direction forced the Venetian oligarchy of the time to cede power over to them. Out of the gatherings sponsored by the Giovani circles, Paolo Sarpi came up with a new insight to save Venice and rose to become the intellectual leader of the party.

It was clear to Venice early on after the rise of this nation-state movement, that science had to be stopped altogether, because it was from this Renaissance view of Man that its power flowed; but, the basis for the success of Sarpi's political faction, was Sarpi's realization that it was not enough to continue to run an anti-science campaign. Paolo Sarpi took a more energetic and insightful approach.

Disconnecting the Mind from the Universe

The conception of Renaissance founder Nicolas of Cusa, and that behind the nation-state, was that mankind can understand the reasoning process by which the actions of non-living, living, and cognitive physical objects in the universe are created, use that discovered reasoning process as the way to truly understand the actions of those objects, and thus have insight into the reasoning behind the creation of the universe as a whole.¹This was the basis for the only competent science, and the basis for the general understanding that mankind can know universal principles, wield them to act in society, and use them to transform society as a whole, leading to a culture that follows the power of reason above all.

Sarpi's program was to destroy this view and promote one opposite to it, all in the name of science, severing the mind from its compatibility with the universe entirely. This was accomplished in three steps:

First, Sarpi defined the nature of the universe, and the nature of actions of bodies in the universe, as reduced merely to the sensual depiction of the bodies themselves, i.e. the fact that they can be described with length, depth, and breadth, and that they moved around in certain ways.

Sarpi argued,

“The matter of natural things is nothing else than extended body understood, being what persists through transformations and never ceases to be. The body is indefinite extension, which, delimited by surface, line and point, assumes a shape. It constitutes, of itself, an infinite and unordered continuum upon which infinite orderings and infinite figures may impress themselves. ... Universals have no existence whatsoever. What do exist are bodies, extended and shaped, which determine and cut into matter so as to make up individual objects which man may perceive through external, passive senses, and matched to one another depending upon how they resemble one another, thanks to an active and internal sense...”²

There was nothing essential to any created thing that held it together which the mind could discover in either non-living, living, or cognitive species. What is mistaken for principles are nothing more than an “arrangement of matter,” with each individual object only “having existence for” no other reason than “the benefit of its own matter.” Therefore, there is no qualitative difference between any existing thing, it being just a different order of that same linear extension which makes up the universe. No universals, no principles, and no laws unseen; they were asserted to be purely mental constructs to serve the fantasies of man, who hoped to be wise, but in reality would never be better than a beast. Sarpi wrote cynically, “Essence and universality are works of the mind.”

This limitation of human knowledge to matter as pure extension, served to define the relation between the mind and the nature of actions of non-living, living, and cognitive physical objects in the universe, to be one of purely sense perception.

The next step, to define how man related to that infinitely boring and extended universe, was then based on the “man” of Sarpi’s nature.

Since the universe of the unseen doesn’t exist, the man of Sarpi’s mind has no ideas, but only considers sensations. Therefore, Sarpi claimed that reason is non-existent: “We distinguish between our senses and our reason, only in order to be able to disclaim responsibility for our acts.” In this way, all connection between the sense perceptions observed by the mind back to the mind itself is removed, in effect, severing the senses from their own subjective origin, in which the power of hypothesis lies.

But, if something can then be sensually described, then that description is called a law, whether or not that description leads to a reasonable explanation for the process. In other words, with no knowable laws of the universe, Sarpi came up with a new definition for law as merely the formalization of observed senses; they were not truths or principles that

actually govern anything about nature by which a scientist could knowably unfold a process in his mind; they are not intrinsic to an unseen organization, but are only laws of descriptive effects. The “scientist” is relegated to using descriptive formulas of these so-called “laws”, to mechanically extrapolate “future events based upon constant repetition of events past.”

Third and finally, since it is only these kinds of laws which mankind can hope for, in a universe which contains and consists of no universals whatsoever, Sarpi defined the creator of such a universe as powerful, but not necessarily reasonable, and the created and creation itself, unknowable.³ Therefore, with the creator lending no assistance, Sarpi’s whole theorem lattice comes full circle: mankind could not hope to discover the reason for anything created nor how it works, and is left to the role of Vanna White.

In summary, by clearing out the possibility of the mind to understand unseen principles which govern the senses, Sarpi disconnected the mind from the universe, the real universe, since reality is not the reflections of flames on a wall, but the principles which cause the flames themselves to dance the way they do.

Thus, Be a Beast

And since there was nothing man could seek to discover for himself or posterity, Sarpi explained that future orientation, a key to mankind’s commitment to the continuity of discovery, was merely an irrational waste of time, illogical and irrelevant to man’s existence; the wise man, wrote Sarpi, simply lives in the present, like an animal or Baby Boomer in Congress, and knows that there are no truths, only opinions, all of which are just as good as the other. Be degenerate he says: “Do not follow opinion that wears the title of truth, but rather opinion that wears the title of pleasure or usefulness.”

The wise man, writes Sarpi, “recognizes that his efforts at obtaining knowledge always come up against the infinite, and, knowing this is beyond his grasp, he stops and comes to no final decision on any matter, deciding to live according to the day-to-day appearance of things and, in public, support those beliefs which are commonly held.”

And while concocting this philosophy as the basis for securing the future existence of Venice, for that purpose, Sarpi's philosophy held that the future doesn't exist and one must take in present pleasures instead, as that is all that is within the grasp of mankind. “The end of man, as of every other living creature, is to live...simply live in the here and now.” Free oneself from projecting the imagination into the past or future, and enjoy the present time, not for anticipation of the future, but for itself. Like a beast, forget the past and future, trust not in the mind, live for the present means, enjoy the present pleasures, and let the ends work out for themselves.⁴

Sarpi's Children

This is the modern empiricist model: define the sense objects, have them move, but no idea how or reason to find how the objects move, just descriptive laws of their motions; and consequently, information from the senses is considered self-evident truth, principles and causes non-existent, the universe irrational; the mind does not consider its own ability to detect the governing principles of physical processes that would give it a greater power.

In truth, nothing could, and ever was discovered by this method; in fact, it led to as many real discoveries as Galileo Galilei actually made; that is, in full truth: absolutely none.

Sarpi succeeded in popularizing his own philosophical system by building up an archetype for his model consistent with Venetian usury, through Galileo Galilei. For the sake of making Galileo a star, Sarpi and his networks plagiarized for him; the list is impressive: Da Vinci and Sacharias Janssen

were the inventors of “Galileo’s” telescope, Giovanni Francesco Sagredo, the true inventor of “Galileo’s” thermometer, Santorio Santorio and Filippo Salviati the real producers of “Galileo’s” weights and mechanics, Johannes Kepler and Simon Marius the true discoverers of “Galileo’s” “Moons of Jupiter” and “New Star”, Baldassare Capra, the true inventor of “Galileo’s” geometer’s compass, and Christopher Scheiner the true discoverer of “Galileo’s” Sun Spots. All of this was fed to Galileo who was to take on the image of a real scientist, in order to explicitly destroy both Cusa’s Renaissance view of man, and the contemporary genius of Kepler.⁵ Galileo would convey the plagiarisms as his, through the tongue of Sarpi’s philosophy as though it was this new method of thinking of Sarpi that was responsible for the discoveries. Any resistance to Galileo’s sponsored dictatorship over science was met with the full weight of Sarpi’s political networks.⁶

In sum, Sarpi’s insight that would serve as the basis for the future existence of the Venetian system, was to find a way to keep the name science, but take the discovery part out of it, while making people think that it was the same thing; and by preventing discoveries from taking place through this method, the vitality and meaning of science would be destroyed, from the inside.

If the currents of science could be taken over and enslaved to a single model that accomplished this task, then the abilities of the people to both wield the power of choosing reason rather than arbitrary will, and progress in discovery by educating their own wills according to reason, could be defeated, and under the arbitrary rule of the empire, the source of power and purpose of the nation-state with them.

This insight and its corollaries recruited a circle of inner elites in Venice, and Sarpi initiated similar operations in the North, both in the Netherlands and its close neighbor, England, to prepare a new staging ground for Venice’s operations. Venice was to relocate its base of operations in the North, initiating trading companies in London and Amsterdam in order to set

up a global financial maritime power that could crush the new nation-state system out of existence. Venice had destroyed the culture of the Netherlands throughout the 16th century, through the horror of the Spanish Inquisition and continual warfare, and by the middle of the century Venice's usurious evil was successfully imported, making the Netherlands one of the leading financial and banking centers, with merchants all over Europe rallying at its enormous stock exchange. But then, with the initiation of Sarpi's plan to move North, Venetian trading companies themselves began dominating its economy, and by 1609 the Bank of Amsterdam was founded,⁷ which was the first stock-jobbing, speculative bank of its kind, fusing usurious Venetian banking with the speculation of the stock exchange which had become so famous in the Netherlands. By the next year in 1610, the Netherlands had been brought under political alliance with Sarpi, the Bank of Amsterdam dictated public policy, and the Netherlands grew to the greatest financial empire of trade that ever existed up until that time.⁸

After Sarpi's death in 1623, the main promoter of the Galileo project, theologian Marin Mersenne, organized a circle of empiricists that very same year with financial backing from Sarpi's personal ally Henry Wotton and the Cavendish family, among others. Sarpi had tutored Bacon and Galileo, while Thomas Hobbes and Mersenne extracted what they could from Galileo, with Mersenne communicating directly with Sarpi's personal secretary and financial handler of Galileo, Fulgenzio Micanzio. It was out of this Mersenne network that a suitable empiricism congruent with Sarpi was found, to create a religion for the subjects of the Netherlands and the expanding Venetian empire: Cartesianism.

Rene Descartes lived most of his life in the Netherlands, and starting "making it" in the 1630's after getting big support from the Mersenne circle. He traveled regularly to Paris to meet with them and they in turn to the Netherlands, with Mersenne and Hobbes guiding Descartes' hand in writing his work. Descartes' philosophical Meditations, a likeness of Sarpi's philosophy, was first sent to Mersenne, and then given

approval by Hobbes, Galileo's direct student. In addition to the mathematical monstrosity which was his Geometry⁹, Descartes' philosophy of the universe and the mind was even more endemic and disastrous for the intentions of the Westphalian structure. Mind dead and corrupted persons were the result.

The fundamental tenet of "Descartes'" philosophy of the universe was straight from Sarpi, that the essence of matter lies in extension, or length, width, and breath, and fills up the assumed "empty space" of the infinite box which is his universe. Although it introduced its own silly attempt at plausibility, the reason the Mersenne circle gave Descartes Sarpi's doctrine of extension was to deny any physical properties of bodies, such as inertia, hardness, color, or weight, because physical properties cannot be sensually depicted with geometry. Therefore, the purpose of making extension the nature of a body, was, that because it can be sensually depicted with geometry, then investigations of nature can be limited to the senses. Exactly this purpose is expressed in Descartes' assertion that the only truth is raw senses and mathematical descriptions, "I know of no kind of material substance other than that which can be divided, shaped, and moved in every possible way....and there is absolutely nothing to investigate about this substance except those divisions, shapes, and movements; and that nothing concerning these can be accepted as true unless it is... considered as a Mathematical demonstration. And because all Natural Phenomena can thus be explained...I think that no other principles of Physics should be accepted, or even desired." [2] Pure, unbridled Sarpi; there are no principles of physics.

After Descartes' death, a study group started at Leyden in the 1650's, pushing his mathematical nature of the universe, and in 1659 the De Witt leadership of the Netherlands personally published Descartes' works for the sake of the Venetian stock system, and translated Descartes' Geometry, which attempted to reduce the entire universe to algebra. By the 1670's

Descartes' work was sponsored doctrine in all the universities.
10 [3]

Venice's IMMORTAL Enemy

The method of Sarpi's networks in preventing discoveries, destroying the morality of human culture, and creating a decades long war, all helped to spread Venice's agenda; however, from the day that Gottfried Leibniz came of age, Venice would increasingly be faced with an existential threat to their system. As the bane of Venice's existence from that day to the present, as expressed in Lyndon LaRouche, Leibniz's mind would be a constant, ironical disproof of Sarpi's insistence that human ideas and minds do not exist.

Leibniz, a young theologian and lawyer who was gripped by the cultural shift of the Westphalian System¹¹, was fully inspired by the way in which Jean Baptiste Colbert was organizing France in the 1660's according to the economic principle, that the power of man's ideas should be assimilated throughout the society to increase its standard of living and power, as the greatest wealth of nations. In 1672, he traveled to Paris, hoping to advance the cause further. Years before his arrival, Leibniz had written a design for a Society of Sciences in Mainz, and an attack on the core of Descartes' system.

With a resolve toward defeating the more deeply rooted enemy of empiricism, Leibniz joined Colbert's technology school for the next years, where he became associated with the great experimental scientist and DaVinci follower, Christian Huygens. For Leibniz, it wasn't a piece-meal approach; by the time he was studying in Paris, the comprehension of the real universe as incompatible with the entire empiricist model occurred as in a realization in a single moment. This he did, not through adapting to opinion, but in examining his own mind and genius, and allowing the powers of his mind to operate outside of the Euclidean, Cartesian models that were being pushed.

Upon leaving Paris, Leibniz planned both a continuation of the Colbert school outside of France, and directed his powers of invention to outflank Venice at their own game.

The Mind's Universe

Following Nicolas of Cusa's concept of human reason as a level above the simple rationality of geometry—that mankind could grasp generating principles, or transcendentals, such as the quality of circular action over simple extension—Leibniz went beyond the extension based algebraic methods which Descartes had imposed. Particularly, in the case of physical curves, such as the hanging chain, and the isochronic curves, Leibniz discovered a method by which the mind could discover the unseen physical relationship that is maintained and guiding the change along every smallest moment of the curve. Rather than imposing an extension box upon a physical process, the physical characteristics themselves guided the investigation. Leibniz looked only at those geometrical and physical functions of physical, or geometrical curves, which were direct effects of the action, or unfolding, of the curves, and was able therefore to make the geometrical measurements of the curve reflect that intrinsic structure.¹² Those functions were then the means to discover the characteristic of change, the differential principle, governing the geometrical and physical curves at every moment. Then, the now conceptualized sense perceptible curve existing as whole in the mind, in other words, the integral, was then understood as a reflection of that differential, at every moment.¹³ Leibniz thereby showed like Kepler, that it is what lies within the experimental paradoxes of what is unfolded to the senses that can lead to increasing man's knowledge and power, and not the senses themselves. The infinitesimal calculus is what the mind conceives as true, not the senses.

He made this point even more explicit and powerful, however, by turning this process into a new scientific language which actually expresses and describes these unseen principles,¹⁴ and was the first to make this power of man into a language

that could be universally communicated and applied to all physical processes.

At the same time, in the course of ridiculing the absurdity of Descartes' arguments or rather, as he said, simply "pronouncements based on authority rather than arguments", Leibniz began the first comprehensive study of forces, which are unseen, but measurable in their effects, culminating in the 1690's with a complete Keplerian manual for modern science: Leibniz's Dynamics, a science of causes. Through his demonstrations and reasoning, Leibniz pointed out that "the common crass concept of material substance is imperfect, indeed false; this concept is borrowed exclusively from the testimony of sensory imagination." [4] Leibniz showed that since there are invisible principles which must organize matter, then the matter which is intimately related to those principles takes on an active nature¹⁵ just as those principles are active, in the same way that physical curves were actively unfolded by infinitesimal principles in his calculus; and thus his monadology, that monads are not sense perceptible unities, or infinitely hard inelastic particles¹⁶, but philosophical unities, the principles that organize matter.¹⁷ Generalizing this principle for science as a whole, dynamics is a science of the unseen, the bounding causes which guide the actions of non-living, living, and cognitive matter, and how these causes bound the action of the composite they create, and further, how the causes themselves act to create change.¹⁸

An explosion of articles and discoveries erupted from the pages of the Leibniz's *Acta Eruditorum* throughout the end of the 1680's, and by the middle of the 1690's had completely revolutionized all of geometry, mathematics, and physics. To emphasize the point: through Leibniz's infinitesimal calculus, unseen principles of physical actions were now actually made definitively expressible, and thus Sarpi's precious Venetian deployment to hijack science overturned.

Thus, Leibniz's discoveries, made for their own sake and the glory of man's role and power in the universe, were also

intended as a direct attack on Sarpi's empiricism, Venice's main principle of cultural warfare.

Through Leibniz's revival of a true metaphysics according to these sciences, like Kepler, he defined the notion of a true scientist, who, understanding the mind he is using, dwells within the domain of creativity, which itself, he realizes, must be congruent with the creative process by which the universe itself is constantly being created. Therefore, rather than the nature of the human mind reflecting a universe that consisted of extension, the universe instead reflected a human mind of a nature which consists in a capacity as an agent for the continuing creation of the universe.

The Dynamic of the Nation-State

Leibniz's science of reason and causes was the guiding hand in building a republican movement that could defend the rights of man according to the Westphalian intention, capable of cutting through the empiricist sophistry that had gripped Europe as a whole.

In the years after his return from France in 1676, Leibniz organized more broadly for the creation of academies of science in each European capital, working in close contact with one another, supported by rulers who likewise sought to promote the common good and general welfare of mankind.

In contrast to most of the academies in Europe, which, having abandoned DaVinci's inseparability between scientific experiment and improving man's condition, were thus devoted only to the satisfaction of curiosity, Leibniz's Academies were designed to channel the development of the arts and sciences for the benefit of the countries and their inhabitants, through the promotion of manufacturing, industry, and commerce. This would be done, as he said, in order that "the republic of scientists were no longer a mere

phrase but became a well organized and prosperous great power, a federation of learned societies doing their best to civilize mankind through the expansion of sciences.”[5] Guided by the principle that the purpose of science was to apply discoveries to increase man’s power over nature, he wrote, “Sciences and arts are the only genuine wealth of people which distinguishes them from animals and discriminates between civilized nations and barbarians.”[6] As the promotion of society is the only basis for a standard of value, real scientific economy is based on this intrinsic value of creativity, in contrast to Venetian monetarism.

Just as Leibniz’s own scientific discoveries were made in accordance with demonstrating the nature of a universe which placed man’s reason as the guiding hand above all, Leibniz’s creation of the Academies of Science were proscribed, guided, and later established from this highest standpoint, of bringing mankind out of its infancy, and freeing it from the monetarism and usury of Venice, defeating Venice’s renewed Sarpi empiricism which promoted “science”, but outlawed discovery and thereby relegated all economy to monetarism.

While Leibniz’s entire intent was moving in this direction, Venice was moving to spread its monetary empire to colonize England as a new base for their bestial operation to bring an end to the Westphalian era and civilization itself; England, which incidentally served to define that very question for the future of Europe, and America.

This brings us to, now, to the heart of our tale.

1. The Battlefield of England

As the decade of the 1690’s came to a close, with England’s life blood being sucked dry, Leibniz reflected on the growing torrent of cultural decay of Sarpi’s spawned empiricism:

“I even find that somewhat similar opinions, stealing gradually into the minds of men of high station who rule the

rest and on whom affairs depend, and by slithering into fashionable books, are inclining towards the universal revolution with which Europe is threatened, and completing the destruction of what still remains in the world of the generous sentiments of the ancient Greeks and Romans, who placed love of country and of the public good, and the welfare of future generations, before fortune and even before life. This 'public spirit' as the English call it, is dwindling away and is no longer in fashion; it will die away all the more when it ceases being sustained by the good morality and true religion which natural reason itself teaches us....They sneer openly at love of country, and they ridicule those who are concerned for the public good. And when some well-meaning man speaks of the prospects of posterity, they say, 'let the future look after itself.'"[emphasis added][7]

Although officially occupied by agents for Venetian empiricism and empire since the reign of James I, such as Hobbes and Bacon, the Venetians didn't officially move to take over England until 1688. Fed up with the Stuart's resistance to setting up a Central bank like Amsterdam, and their refusal to being used against France for war, Venetian agents had been conspiring to overthrow the King since the 1670's, led by Ashley Cooper, founder of the Whig party, who incidentally, had been in exile since 1681 for this very reason. Then, in 1688 England was fully invaded by 20,000 men and 500 ships. A Junto, of mostly Whig aristocrats who allied with the Netherlands invasion by the house of Orange, became the leadership of the government, many around the circle of Cooper, some traitors in England, other go between like Netherlands Ambassador John Churchill. The plan was to indebt and loot England, use it for war speculation, and eventually turn England into Venice.¹⁹

Patriots of nations don't submit to a foreign empire so quickly, however, and despite the long corruption of England since the Venetian companies moved in under James I in 1603, the culture itself still had a kernel of sovereign impulse, led by patriots and collaborators of Leibniz, such as Robert Harley and Daniel Defoe. In 1691 they issued a plan to fight the

speculative war debt being created by the imported Dutch finance, through a national land bank for development and regulation of interest rates to be in accord with the necessity of the physical economy.

This was a job for John Locke, the Junto's main propagandist, having come over in Queen Mary's baggage in 1688, after living in exile with his sponsor Cooper. After attempting to justify the Venetian coup with his treatises on government the previous year, he met Harley's rational plan with his own sophistry, rehashing some economic arguments of the Venetian allied Salamancan school which he had plagiarized, such as Martin de Azpilcueta Navarro. Locke effectively said, "Your plan would upset the bestial society which the Venetians had run the whole operation of bringing Orange in the first place, and that would really cramp the style of their attempt to load debt and destruction upon Europe." Thus lying, and saying anything necessary to get his point across, Locke attacked any government direction of the economy, control over currency, or any limit on interest rate to prevent speculation, arguing that the market sets the right value. "Things must be left to find their own price", as the "natural interest" is set by an unknowable force. Money is money, Locke said, and can never be brought under control, just because I said so, and you are too confused by my sophistry to disagree.

After such disorientation was spread, Charles Montagu, treasurer, key leader of the Venetian Junto, and part of the welcoming committee of the foreign invaders, established the Bank of England in 1694 through an act of Parliament, which was founded by William Paterson, an imported student of the Bank of Amsterdam. Montagu then organized large loans through the private Bank, controlled not by the King, but parliament, and while supposedly helping the war torn economy, created a giant monetary debt out of thin air, a quantity for speculation and impoverishment of England, proceeding to push through dictatorial financial decisions for the economy, while never once issuing anything for development. For the job, Montagu selected the alchemist and

calculating machine Isaac Newton, appointing him Warden of the Mint to carry out the enormous data processing job involved in the lying and faking on behalf of the numerous transitions in the economy for the sake of the Empire, such as a gruesome recoinage which cut the people's wealth in half.²⁰

In the face of all of this, some of the English patriots continued to fight, as parliamentarian Robert Price, rallied, "How can we hope for happy days in England when this great lord and other foreigners are in the English and also in the Dutch councils?... I foresee, that when we are reduced to extreme poverty, as now we are very near it, we are to be supplanted by our neighbors and become a colony of the Dutch."

By, 1697, a deliberately forced depression and credit crunch left England weakened and subdued for the Junto to then give the Bank a monopoly over all banking and the appointment of Montagu as Prime Minister. The financial takeover by Venice was complete, and the Parliament ruled the bank as the de facto government, as all policy making was absorbed into it. Montagu took a trip to Venice the next year, to report on the success of the operation. The nation of England, thrown into war and looted, was being successfully colonized just as the Netherlands had before.

Leibniz's Flank

However, unlike what the Venetian empiricists would have hoped, history is guided dynamically, and the idea behind the Westphalian system acted in ways beyond their comprehension, with a struggle ensuing, having far-reaching consequences.

Gottfried Leibniz had begun working for the Duke of Brunswick in the House of Hanover in 1680, recruiting his wife Sophie and her daughter Sophie Charlotte to his view,

that only a movement of educated reason could defeat the arbitrary power of Venetian manipulated assemblies and rulers. In 1690, he had begun a history of Hanover for the Duke, gaining access to many libraries for his task; by 1692, Leibniz discovered a flank against Venice.

Leibniz demonstrated that Hanover, in which the House of Brunswick resided, was in fact next in line for the English succession, following Anne, daughter of James II. After organizing for his claim, his finding was made official in 1696, and by 1701 Robert Harley succeeded in getting the parliament to pass the Act of Settlement, guaranteeing this Hanoverian succession. To the European theater in the war against Venice's takeover, when Queen Anne took the throne in 1702, this meant that Gottfried Leibniz, the renowned leader against empiricism and advocate and warrior of the Westphalian system, could be personally advising the head of state of England at any given time.

On the opposing side, when Anne came to power, the Venetian Junto moved in to make her its tool, as William of Orange had been, and relations with Hanover where Leibniz was advising now Electress Sophie, were tightly controlled.²¹ Things came to a head in 1705, when Leibniz and his circles conspired for a visit of Sophie to London, in order to directly influence Anne against the Junto. Montagu's network blocked the action by means of an open letter circulated to embarrass Queen Anne and smear Leibniz's name; and subsequently Montagu personally visited Hanover attempting to secure the crown for the Junto over Leibniz, in the case of Anne's death.

Other, more covert opportunities would have to be taken, and Leibniz's allies around the court began secretly educating Anne in the principles of the nation-state, including republican intelligence operative extraordinaire and Leibniz's main ally in the Isles, Johnathon Swift. Secretary of State Harley was on the verge of achieving peace with France in July 1706, when the Junto struck back, demanding Harley be booted out and replaced by one of their own. Anne resisted, and her intention began manifesting itself against them,

leading to a breakthrough when Swift personally came to England in 1708 and Anne began moving openly against Venice's interests in favor of England, even seeking to replace her Venetian Junto Prime Minister. The Swift-Leibniz faction was threatening takeover.

The Junto, in a panic, pulled out all the stops. Montagu flagged his asset at the Mint, now President of Royal Society, Newton, and a proposal for a public defamation campaign against Leibniz was written out. John Churchill, head of the army in the ongoing war with France, and who had had the most control over the Queen, personally blackmailed her by threatening resignation unless Harley was dismissed; the Queen submitted, Harley resigned, and the Venetian Junto subsequently filled every post in the cabinet. Having won the battle, the penned accusation of plagiarism against Leibniz was shelved for the time.²²

But the Junto had overplayed its hand, and Anne was simply waiting for an opportunity to bring the Swift-Leibniz circles in to save her nation, who in turn used ironic wit and the enemy's own mistakes against them. When Swift returned to England in August 1710, the Junto ministry was cleaned out by the end of the month.

Under these new circumstances, the idea of Leibniz coming to London with Sophie was an ever present threat in the minds of the Venetians and the Dutch invaders.

Montagu's Precious Rant

Realizing their defeat, the Venetian Junto raged, and took every other route they could to discredit Leibniz, whose influence they could feel, but not understand. Only two months after being ejected from the ministry, it initiated its latent attack on Leibniz.

Montagu, steered from Venice, advised his asset at the Royal Society, Isaac Newton, that for the role he was to play in the

subsequent period it would be wise to move the Society to a location that would be more supportive of the new agenda, to London's financial district. In November, the Royal Society, which had always been located at Gresham College, was moved to Crane Court by diktat, against the desires of the majority of the Academy, by Newton in 1710. With this done, the charge of plagiarism penned in 1708, was now issued in the public forum of the Royal Society Proceedings from the new Royal Society, in the financial district of London.

Meanwhile, with Harley as Prime Minister, England gained a respite from willful looting and destruction of the economy, and his original 1691 plan for a national land bank was pushed through, and started to make the means for economic development available for the country, and began to alleviate the debt which had been created. Despite attempts to stall increases of available money through the use of tool Newton at the Mint, Harley's government corporation served as a driver for development. Leibniz endorsed this plan communicating to the Harley cabinet: "Your new ministry disabused those foreigners who had doubted if it would contribute, as it has, to the general situation. For one can say that it surpasses its predecessor, not only in paying the costs of the present, but also in making good those of the past, and satisfying the debts of the nation." [8] In this new context, Leibniz devised a second attempt to bring Sophie and himself to London to strengthen the validity and resolve of Harley's ministry.

In desperation, Montagu had his asset Newton at the Royal Society issue a rant in April 1712, about anything but the infinitesimal calculus, declaring himself its originator, and demanding Leibniz to never have existed. This rant was subsequently praised by the financiers and bank parasites in the Court, and in the wake of the fraud they used this "official" ruling of plagiarism to their effect, wielding it as leverage to move against Leibniz directly.²³ Thus, when the new visit for Sophie to London was officially made in September of that year, it was blocked, this time despite the dominant Harley ministry. The anti-Leibniz faction in Anne's cabinet began to attack him from within, and personally encouraged Anne to

prevent the visit. In addition, Montagu himself had appeared at Hanover, counseling Venice's Hanoverian asset Georg Ludwig against Sophie making the trip; Georg subsequently moved to cut Leibniz's salary in Hanover. In the aftermath of this, Leibniz wrote the next month to an ally in the ministry of the difficulty: "You will have received my letter where I spoke to you of the plot that I learned of to attack me in your country..."[8]

When Sophie died in May 1714 of natural causes, Anne was no longer seen as a necessity to block Leibniz's control of England under Sophie, and she herself died within weeks of Sophie, with similar symptoms to those of the wife, son, grandson, and nephew of Louis XIV who were all lethally poisoned in 1712. The newly crowned Venetian asset King George immediately rejected the peace plan with France accomplished by Harley and Anne, and made Charles Montagu his Prime Minister. Venice whom he had served, was pleased.

Leibniz wrote to his ally in Hanover, Caroline of Ansbach, Princess of Wales, that it was not Sophie, but England that was lost by her death. The threat of Leibniz coming to power in England, and coordinating a broader alliance of nation-states, dynamically influenced all of the actions of the oligarchy in England from 1702-1714. With this threat removed, under Junto asset King George in 1714, there was no obstacle the Venetian empire of monetarism could not then overcome. England was now destined to be the seat of the British new world monetary Empire, by the close of two generations later.

2. The Short and Long Interests of Venice

Despite the colonization of England, Leibniz was scoring victories elsewhere around the world for the movement of creative reason. Near the time of the Peace of Utrecht accomplished by Harley in 1713 between France and England,

Leibniz was on the verge of a triple alliance between the policies of England, Austria, and Russia.

Through his longtime conspiracies with republicans in Europe, Leibniz's influence over Charles VI of Austria was growing, and with whose father Leopold I, he'd been in correspondence since the 1690's. In 1712, Charles appointed him Imperial Privy Councilor, and beginning January 1713 he personally spent nearly two years in Vienna, working with Charles and his allies on various projects including the development of the industries and raw materials of Austria, an alliance with Russia, and potentially, Sophie's England. During this time Charles adopted Leibniz's design for an Academy of Sciences centered in Vienna, with Leibniz appointed by Charles as its president. It was modeled on the success of the Leibniz designed Berlin Academy founded in 1700.

In October 1711, Peter the Great asked Leibniz in person to rewrite the mathematics, scientific, and economic program for Russia, and a year later Peter made Leibniz Privy Councilor of Justice. Peter began implementing many of Leibniz's projects and designs, with Leibniz writing to Peter²⁴ "I am not one of those who love only their mother land or any single nation. All my thoughts are turned to the benefit of mankind because I consider the Heavens to be my mother country and all sensible persons its fellow citizens.My ultimate goal is to increase general prosperity... I prefer seeing an upsurge in the development of sciences in Russia than their slow progress in Germany. A country where sciences sustain continuous growth will be dearest to me because this country is most likely to promote and thus to contribute to the general good of mankind." [6]

Berlin, Vienna, and St. Petersburg were all implementing Leibniz's anti-empiricist scientific model of discovery.

During the same time, his work of many years to demonstrate the futility of the Protestant-Catholic conflict which Venice had used to beat back the nation-state was beginning to bear

fruit, and Leibniz had been commissioned to organize an alliance between Austria and Russia to end war with France.

Therefore, consider now what is relevant to understanding the process we have been investigating so far in this report: the takeover and destruction of science and civilization by Venice, and Leibniz's ingenious routing of that plan. Consider those intersecting intentions from the standpoint of the implications for Venice of certain predicates of his broader organizing of conspirators for an alliance of reason. As the vortex for all the great statesman of Europe, the potential which he had built up through his meetings and correspondences were coming to fruition faster than Venice could keep track. It would appear that despite Venice's political victory in England, the power of Leibniz's ideas themselves, and the blossoming of creative thought which they had born throughout Europe, meant that a longer term, generational success for Venice was impossible.

And from that standpoint, consider the events which had occurred in the run up to that, which is now unfolded, here.

Enter, Abbé Antonio Schinella Conti

Faced with the explosion of Leibniz's victories, the Venetian empire was fanatic, and acting on the longer wave historical impulse, Abbé Antonio Schinella Conti, "theologian" in the tradition of Paolo Sarpi and Francesco Zorzi, having been selected as a top intelligence agent and specifically groomed for this task since 1708, was deployed North in 1713.

Conti went to France posing as a follower of Leibniz's metaphysics, and made inroads into Leibniz's political networks, particularly with Leibniz's key correspondent in the French Court, Nicolas Remond, the chief counselor for the next ruler of France. By these means, and making a show, Leibniz's correspondents' sung Conti's praises as a scholar, and Conti was able to attract Leibniz's attention as a possible ally. Although Leibniz was skeptical of the renown of his work, raising the question whether Conti could rid himself of the

“spur of wanting to be original, ”Conti’s level of sophistication was from the heart of Venice’s interest.[9] When in 1715, Conti wrote to Leibniz offering his assistance to work on his behalf in London, Leibniz took his chances in using him to remove the blockade to his passage into London.

Georg Ludwig of Hanover, now King George I of England, had long been a Venetian dupe, and had, since his crowning in the summer of 1714, proceeded to keep Leibniz from entering London when he returned to Hanover from Charles VI’s side in Vienna, to resume his post he’d had for the preceding 40 years as Privy councilor of Justice and historiographer, as he was supposed to have traveled to England with Caroline of Ansbach, and the new King. At that time, with Montagu as Prime Minister under George I, his personal project of the Newton hoax was increasingly used for the purposes of the empire; in fact it was the main obstacle to his entrance. And likewise, also since the crowning of George I, an abundance of Leibniz’s allies in Hanover had been pushing the Royal Society to end the “dispute” in order for Leibniz to gain access to London, in addition to Leibniz himself lashing the hoax with satirical wit.

The 1712 ruling of the Royal Society which had secured the main source of political capital for Montagu’s faction back then, was waning by 1715, and the ever unreliable Newton had worsened the situation by his wild defense of the fraud in 1714, where he feigned a supposed committee of authors when he had written the ruling himself, and spilled his silly, stream of consciousness rage about infinite series, and his blatant lie to cover the glaring fact of the lack of any calculus in his Principia, which Leibniz had pointed out: no one with any respectability believed the sloppy liar.²⁵

Newton and the Royal Society would have blown the whole operation; so, in what otherwise would have been handled in the usual Newton way, entirely incompetent²⁶ and useless for Venice’s desires, Abbé Conti, out of the very bowels of Venice’s satanic temples, personally intervened.

With George I securely in place to make his move, the door to the inner circle of the Kings court was an easy passage for Conti in 1715 to then act the part of Venice's immediate interests, in its then state of desperation against its immortal foe, in every and any, possible way.

First, Conti secured the continued blockade of Leibniz by salvaging the plagiarism fraud. Conti personally renewed the idea of settling the non-existing dispute and then personally had the husband of King George's mistress call for a public display of letters between Newton and Leibniz. Conti next convinced Leibniz that if he acted as direct go between, he could get Newton to concede the dispute, and clear the way for Leibniz's entry into London. Taking him up, Leibniz wrote a letter showing that Newton's hoax had nothing to do with the calculus, and his claims limited to infinite series. Conti then personally coaxed Newton into replying, rekindling his petty rage. Having won his aim in reigniting the embers of controversy, Conti could then begin openly working against Leibniz, and reported that he had "been won over" to the other side.²⁷

Secondly, having successfully blocked Leibniz's entry to England, Conti acted on another issue, near and dear to Venice's long term interests. Of all of the reasons for the Venetians to hate and fear Leibniz, during his research for the history and origins of Hanover since the 1680's, including his stay in Venice in 1689-90, he had poked into very sensitive areas which the Venetian's held sacred. On his departure for Hanover in 1690 Leibniz noted, "I am about to return home after a long journey undertaken by order of my prince for the purpose of historical investigations... there were contradictions and errors on the matter in the historians of Este, together with a complete confusion of houses and persons." [10] The House of Este was, in addition to being the leading house of Hanover, the most avid House for the dissolution of the Westphalian system and a return to the ultramontane system, where the arbitrary law of one emperor overrides and dissolves the sovereignty of the laws passed by nations. Leibniz's views on the history of the House of Este,

and what other facts he may have found, brought the Venetian hatred of Leibniz to a boil.²⁸

Venice knew that Leibniz's history of Hanover, near publication in 1713, was to include his work on the House of Este, in addition to Leibniz's expressed intention to publish his historical work as a fuller, complete history of the peoples of Europe. Thereby did Abbot Giuseppe Riva, chief secretary of the Este family working then in Hanover, exchange letters with Italian Historian Lodovico Muratori around the same time that Montagu triggered the Royal Society to make its plagiarist claim; Riva utilized the fact that Leibniz had borrowed historical manuscripts on the house of Este to drum up more whispers of plagiarism against Leibniz; but of infinitely more importance to Venice was to preempt and discredit Leibniz's own publication. Thus, in 1716, Conti brought Riva and Newton to his house to strategize, and subsequently, Conti personally had the message delivered to Muratori that he must publish a history before Leibniz, and rewarded him kindly for doing so.

Third, with Leibniz kept out of London, Conti moved to extinguish any of his remaining influence. After having blown up the plagiarism hoax, Conti ensured an end to Leibniz's further influence inside the court, and, with the help of court chaplain and one of Newton's handlers Samuel Clarke, began conducting long brainwashing sessions of Caroline, wife of future King George II and Leibniz's closest ally remaining in the court. For the brainwashing, Caroline reported to Leibniz that Conti had "taken the trouble to lose some of the papers" of Leibniz which she had been studying.^[11] Conti proceeded to guide Clarke's hand in a correspondence with Leibniz, which drew out the true face and reason for what would be Conti's subsequent task.

Clearly, the depths and range of Leibniz influence in England and other venues, required nothing short than the personal act of Venice; however, all of this so far was merely damage control, and did nothing in the way of dealing with the sticky subject for Venice of the power of the human mind which they

so loathed, nor the effects of its creativity in continuing to subvert the model which Paolo Sarpi had hoped to achieve, the unleashing of all of which, Leibniz had directed, and whose mind's continued existence ensured creativity's victory over Venice. With Venice's motive now in mind, the following becomes clear:

Once the Venetian priest had caught wind of Leibniz's death, Newton received a letter: "Leibniz is dead: the dispute is finished." In the mind that wrote those simple words, a radical shift in intention occurred, and, as though channeling Sarpi's soul from hell, his longer mission, to destroy creativity itself, began.

Having personally stoked the flames of the fake controversy with Newton, the potential which Conti gained through the Royal Society hoax leading up to Leibniz's death, was a mere first step. Immediately after Leibniz's death, Conti began preparations for a distinct shift in Newton's usefulness for Venice, this time for a much more long standing purpose, whose effect lies as far as the causes of global wreckage in today's collapse of civilization, and present obstacles to success. Under the celebrity of Newton, Descartes' soul would be revived, and mathematics would officially return as the only standard of truth, with mass conversions of its followers to a new empiricist religion.

But,...who really was, Isaac Newton?

The answer is, that Isaac Newton, or as he named and considered himself, Jeova sanctus unus,²⁹ would never have been but a passing name today had it not been for Gottfried Leibniz. The real Newton was a nobody, whose only significance in his life time was as a mere tool for the successful colonization of England by Venice, and after Leibniz's death, "Newton the Religion" was used to colonize

the minds of the rest of Europe, and unfortunately most of the world still today.

Swamp Creatures Come From Swamps

At the end of the 16th century and beginning of the 17th, through correspondence and collaboration of Francis Bacon, Robert Fludd, and others, Sarpi succeeded in consolidating what Zorzi had begun to achieve in England, making his inroads in an attempted political takeover of existing science in that country. The British Rosicrucian heirs of Bacon's Oxford Society, created the Royal Society, exerting a growing influence in the name of "science" over Europe. Its black magic and alchemical Rosicrucian cults mystically communicated with a god who was revived and popularized by Venetian operatives against the nation-state, which Sarpi in turn communicated to his followers in secret, as the state religion of Venice. Created out of the hatred of the reciprocal relationship which existed after the 1440 Council of Florence, between Christianity and acts of scientific discovery³⁰, the agenda going back to Pomponazzi and Contarini was to theologially find a way to deny the existence of human creativity, and with it, the conception of man congruent with the existence of commonwealths and nation-states. The product was the "anti-trinitarian" God of arbitrary irrational will on the one side, and the infinitely sinful man on the other.

Underscored by the presence of these governing social forces, and as has already been indicated, nearly all the details of Newton's person are irrelevant. What is necessary is to understand how Isaac Newton was fertile ground to serve as a host and receptacle of the anti-human ideas which had thoroughly infiltrated England.

Although exposed to it earlier, Newton's real devotion to alchemy began in 1667 after returning to Cambridge and working with Barrow.³¹ Newton began reading and making extensive notes in such Rosicrucian tracts as *Themis Aurea* and *Symbola Aureae Mensae Duodecim*, and *The Fame and*

Confession of the Fraternity R.C. He adopted the Rosicrucian view, that if one followed the secrets of Rosicrucianism, one would become part of a superior race that could talk to angels, become immortal through discovering the secret elixir, and infinitely wealthy through possession of the philosopher's stone.

Performing all the steps of alchemy in trying to find the secret of turning lead into gold, in 1675 he met up with professional alchemist Robert Boyle and later that year wrote *Clavis* (the key), the pinnacle of his 6 years of work on alchemy:

“For alchemy does not trade with metals as ignorant vulgar think, which error has made them distress that noble science; but she has also material veins of whose nature God created handmaidens to conceive and bring forth its creatures. Concerning Magnesia or the Green Lion. It is called Prometheus and the Chameleon. Also Androgyne, and virgin verdant earth in which the Sun has never cast its rays although he is its father and the moon its mother: Also common mercury, dew of heaven which makes the earth fertile, nitre of the wise...It is the Saturnine stone.”[12]

By 1678 he had constructed 47 axioms of alchemy, having conducted all the rituals himself. This real, biological Newton connected with what he thought were the hidden mysteries of God in this way, and through his secret knowledge predicted the end of the world coming soon, and came to the conclusion that the universe was created in 4004 B.C. His library eventually swelled to 130 heavily annotated books on alchemy and many of the major Rosicrucian texts.

At the same time, by 1670 Newton had also been converted to the anti-trinitarian cults which had been created and imported from Venice. Newton did not publicly espouse this view, as it would have cost him his Mathematics chair, and his later controllers much more. He however did introduce his assistant professor William Whiston to the faith, who was consequently kicked out of the post in 1710, later saying, “They persecuted me for the very same...doctrines which the great

Sir I.N. had discovered and embraced many years before me;... had he ventured as plainly and openly to publish them to the world as I thought myself oblig'd to do... they must 30 or 40 Years ago have expell'd and persecuted the Great Sir Isaac Newton, also.”³² Whiston added that Newton’s writings and beliefs, “concerning the Trinity in particular” were “occasionally known to those few who were intimate with him all along; from whom, notwithstanding his prodigiously fearful, cautious, and suspicious Temper, he could not always conceal so important a Discovery”, and that of the subject Newton “long appeared to [him] to have been one of the greatest Masters that ever was.”

So, when Leibniz sent him a letter in 1675, having caught wind of his collaboration with Barrow on quadratures using infinite series, Newton reluctantly pulled himself away from the cauldron to write a response, adding “For having other things in my head, it proved an unwelcome interruption to me to be at this time put upon considering these things.”

These were the “other things” in Newton’s “head”, and were in fact the very reason Newton would be picked up by the Venetian Junto in England, and serve as a controllable servant in his subsequent roles he would play for them. Only by understanding this, as will be subsequently shown, does anything about Newton make sense. But it is important to stress that unlike those witting Venetian hands, Zorzi, Sarpi and their associates, or direct correspondents Bacon and Hobbes, Newton was never anything more than an unfortunate, deranged individual whose susceptible soul had been successfully caught in this guiding dynamic.

A New Venetian Torture Manual

When England was being prepared for its later takeover by the Venetian colonized Netherlands in the 1680’s, it was out of these networks behind the Royal Society who selected a then ripe for the picking, Isaac Newton, as the name to stick on a book whose multiple reincarnations would prove, looking

back a century later, to have nearly destroyed almost every area of European science. This was the first step in biological Newton's long political career as active Venetian pawn.

In Johannes Kepler's discovery of universal gravitation, he had experimentally demonstrated the solar system, and implicitly the universe, as being governed by a knowable principle of creative reason, a science of causes, where reality lay not merely in collecting sense impressions alone, but in irony, understood only by the human mind.

The Principia was created to serve as the indisputable manual and method for science, as a replacement for Kepler's method and discovery of universal gravitation, using a mathematical formula, the inverse square law, which expressed an effect named "attraction". Since this mathematical formula was assumed to be able to describe all celestial phenomena, the physical cause of the sun of Kepler's New Astronomy, Kepler's method of the harmonies, and valid scientific method of hypothesis beside, was to be thrown out and banned from science, in kinship with the Sarpi model.³³

The supposed breakthrough of the inverse square law, which was only hailed by those who sought political favors from Montagu, was simply plagiarized by mixing mathematical formulas from Kepler's 1619 Harmonies of the World and Huygens 1670 work on centrifugal force.³⁴ For this task, the alchemist Newton was not required, capable, nor would have even considered it; the only thing he might have done was to resolve the trouble that the Royal Society network claimed to have had in pushing their replacement for Kepler and the human mind, i.e., mathematically resolving the inverse square formula with the geometrical Ellipse. What he most certainly did do for the sake of the Principia's completion was calculate; in addition to his dogmatic adherence to the Venetian state religion, since his only experimental background was prophecy it was the role of human calculator that Newton was chosen for the creation of the first version of this monstrosity.³⁵ A student is recorded as saying, when spotting Newton walking across campus in Cambridge, "There goes the

man that writt a book that neither he nor anybody else understands.“

After this project, Newton returned to his well deserved obscurity as an alchemist and later suffering a mental breakdown through the summer and fall of 1692 until being given a purpose to exist from Montagu who would later use him as calculating machine in the Mint, in 1696. Subsequently, when the Venetian Junto was desperate for something with which to attack Leibniz, a reputation was steadily built up for him inside England: Montagu, himself the former head of the Royal Society from 1695-8, put Newton at the head of it in 1703, and would slowly build up his reputation in England, getting his plagiarized work on light put together and demonstrated in the controlled environment of the Royal Society, with experiments designed to create effects that fit his assumptions, and at the same time a fake version of the calculus rewritten in fluxion notation was printed in 1704.³⁶ The reputation built up would then be launched against Leibniz, when the political fate of the Junto demanded it.

Then, upon the combined influences of the continuing intent to make England the seat of the new Venetian world empire, and the continuing battle with Leibniz, the decision was made in 1708 to put out a new version of the Principia, one that would better serve the purposes for which it was created: a new religious text book for the state religion of the Venetian empire.

The old was riddled with hundreds of errors, and incomplete, including its faulty lunar theory which Flamsteed had pointed out, but above all, it had lacked the ability to perform the function for which Newton was then later to be used. And by this time, Leibniz had refuted Descartes beyond repair and put out a full physics manual, his Dynamics, in the real method of science. In order for Venice's own desperately needed English Descartes; a new Sarpi archetype was required, thus, the 1713 publication of the 2nd edition.

The second version of the *Principia* hardly resembled the first, as it was now thoroughly corrected of the hundreds of errors over the course of four years, filled with new material gathered or plagiarized from other sources which contained most of the so-called substance it was later promoted as having, and in end effect being twice the size, doubling from 500 to 1000 pages. But all of this was to give it more credibility; the real purpose was seen in that its overall presentation took on a radical form of empiricism which lead into explicit satanism, through both the denial of Leibniz's metaphysics which was gripping and circling through Europe in the 1690's with Leibniz's success, and an open declaration of Sarpi's core philosophy of sense perception, which was to replace any hypotheses whatsoever.

The preface now consisted both of a direct attack against Leibniz's circulating principle of sufficient reason³⁷—which gave the nation-state patriots the upper hand—and an attempt to defend themselves from attacks of atheism and the occult nature of “attraction.”³⁸ The 9 “hypotheses” in the old version, became, the four “Rules of Reasoning” in the new version: in addition to the first version's Ockhamite “causes don't exist if they can be explained by the senses simpler”, Rule 3 asserted that there are no innate ideas in the human mind, only sense-perceptibly derived thoughts, and Rule 4 asserted his “hypotheses non-fingo”³⁹, both of which would also be stressed again at the end in the General Scholium, which was perhaps the most significant addition to the book. For the witting reader, these and the General Scholium at the end of this second edition now openly exposed him as a creature of Sarpi, as explicitly including his membership to the anti-trinitarian cults, for which Leibniz would later attack him in the Leibniz-Clarke letters when pointing out, that Newton's God of an unreasonable and winding down universe “will be like the God of the Socinians.”⁴⁰ Looking more closely at Newton's General Scholium added at the end, we see the utmost explicit Socinian expression, echoing Sarpi:

“What the real substance of any thing is we know not. In bodies, we see only their figures and colours. We hear only the

sounds. We touch only their outward surfaces. We smell only the smells, and taste the flavours; but their inward substances are not to be known either by our senses, or by any reflex act of our minds..."⁴¹

Guided by this religion of empiricism as the ever present background, what would otherwise have been simply deemed a mathematical effect, the formula of "attraction" was made into a veritable God. By the diktat of this formula, the universe is made to be a simple universe without the necessity of causes, purely sense perception, and yet is unknowable as to what orders those senses; a Sarpi law in the truest sense. It was meant to explain away any possible paradox that might reveal the nature of man as creative, the true meaning of "hypotheses non fingo". Throughout the new version, the inverse square law was even more explicitly used for this satanic purpose of replacing the human mind.

Physics, and all science, was reduced to the worship of mathematics as the self-evident truth, by which only those who could fall in line with its axiomatic structure, turning off their minds, were admitted into a castrated science where they were no longer able to participate in discovery. The mathematical mechanism of "attraction" was the bait for the mental trap which then allowed the would be scientist to accept a whole religion of empiricism, chanting, "what the real substance of any thing is we know not" and with their minds removed, were relegated to expressing their feelings of frustration through other venues.

And finally, in form with the next consequence in the theorem lattice of Sarpi's model, this limitation of knowledge as sense perception, and laws limited to sense perception, leads to the mysticism of Newton's belief that the cause of "attraction" which the formula showed, was a continuous miracle, and only "explainable" as the result of an unknowable action by an unknowable Socinian God, who immediately impels bodies towards each other constantly.⁴² Indeed, rather than Kepler's principle of gravitation which gave a sufficient reason for both elliptical motion and the particular ellipses found in the solar

system, through the creative principle of a continuous harmonic tuning of the system as a whole, reason was held as secondary to the pure arbitrary will of the creator, a fact which Leibniz would later draw out as the true face of the beast in his correspondence with Clarke, under the supervision of “Theologian” and priest, Abbé Conti.

These were the new elements added to the second edition of the Principia; in sum, it was turned into a Sarpi manual of which he would be proud, and a weapon against Leibniz’s science of reason and human creativity which guided republican thinkers to choose the promotion of the human mind. When this edition was finally published in 1713, Antonio Conti’s strings were fully in effect, if not earlier, and he would from thence forth take over the regulation of the asset Newton until his death.

In the aftermath of Leibniz’s death, Conti may have realized that choosing Newton for the task was a risky gamble, seeing as how many crucibles he had in his closet, but, despite that fact, he deemed that Newton fit the bill of a new religion of the empire, as Sarpi’s Descartes had served until he was rendered useless by Leibniz.

With Leibniz safely dead, Conti spent the next 10 years cleaning up Newton’s closet in preparation for his after life⁴³, and then, proceeded as follows.

3. Sarpi Wins Europe

Continuing operations for his purpose in France and England since Leibniz’s death, Conti only returned to his Venetian lair in 1726, after he successfully created a machine to set in motion. Having recruited Voltaire as part of his activities in France, he deployed him to England, near the end of Newton’s life, to coordinate the run up to and aftermath of how his death would be handled for the vile purpose Conti had in mind. Manufacturing stories of Newton’s greatness and fairy tales of a man that never was, it was from Voltaire personally

that came the story of Newton as a childhood genius that discovered attraction and fluxions in his garden in 1665-66 through spiritually endowed fruit.⁴⁴ It is from Voltaire's myths and coordination of the information of others, where all the stories are heard today of Newton as the gentle, aloof scholar, only thinking of his great discoveries.

After spending at least 2 years in England after Newton's death to coordinate the English side of the story, meeting regularly with people such as Newton's pre-Conti controller, Samuel Clarke, and other enemies of Leibniz and Swift in the court, Voltaire returned to France to unleash the next stage of the plan Conti had hatched. The real myth and "Religion of Newton" was begun.

Back in France, Voltaire would write his famous Letters Concerning the English Nation, in which he coaxed the French audiences to give up their suspicions of Newton, and accept him as the new Descartes. Years later in 1737-38, he and Conti's Venetian countrymen Francesco Algarotti, printing in Venice, came forth with long philosophical works dedicated to popularizing the abstruse unreadable Principia and Optics of "Newton", while making "attraction" a household religious belief, applying it to every thinkable subject, and with Voltaire specifically defending Clarke's attack on Leibniz's principle of sufficient reason.

The second phase and formal completion of Conti's operation began when Frederick the Great became King in 1740. A swarm of witting, unwitting and half-wits perpetuated Conti's agenda. With Frederick having been manipulated by Voltaire, Louis Maupertuis, Leonard "infinite series" Euler, Jean le Rond d'Alembert, and others, began filing into Leibniz's own creation, the Berlin Academy, to join Conti's plan to destroy Leibniz and convert more people to Newton.

With the intellectual stronghold of Leibniz's Berlin Academy corrupted, the spread of Newtonianism moved beyond the surface level of popularizing his attraction, into the so-called, hard science, in what was an attempt to stamp out Leibniz's

dynamics, and infinitesimal calculus application to physical and transcendental curves of the Leibniz-Bernoulli school, by reincarnating Descartes in Newton's clothes. By the mid to late 1750's, the job would be fairly accomplished and almost all European science and thought would be subject to Conti's mental gestapo.

The Fruits of Conti's Loins

It is in d'Alembert where we see the true intention of Conti most clearly; Descartes in the flesh. With the irony missed on him, d'Alembert was released from the gate in 1743 with his Treatise on Dynamics, attempting to create a replacement for Leibniz's dynamics that would be based on Descartes, and be consistent with the Newton ideology of pure mathematical description, thinking himself to have cleaned dynamics by washing it clean of reason and metaphysical forces.

Seeing as how Leibniz had already founded a rigorous science exactly to the contrary, the first thing Maupertuis and d'Alembert did, was to throw out reason altogether, as the first assumption to extend Newtonian mathematics into dynamics. With reason out of the picture, d'Alembert huffed that he would erect an entire system of physics based on non-existent, infinitely hard particles⁴⁵, in order to be able to hold on to explaining all phenomena with movement and geometry; as d'Alembert expressed, "We know nothing about movement except movement itself....the metaphysical causes of this motion are unknown to us, that what we call causes....are only improperly called causes; they are effects from which other effects result...forces inherent in bodies in motion are obscure metaphysical beings which are only capable of spreading shadows on a science clear in itself." [emphasis added][14]

For this assertion to be rammed through, it was necessary to circumvent having to deal with physical properties of bodies that might imply or demand investigations of unseen causes; however, since Leibniz had specifically demonstrated the necessity of forces when showing the fallacy of trying to derive

all laws of bodies from geometrical extension, refuting Descartes' doctrine beyond repair, for theirs to have a glimpse of credibility, the Newton cultists had to think up something else.

D'Alembert first, and later Euler,⁴⁶ like good sophists, said: "Ok, fine, the geometrical property of extension (length, width, and breath) isn't enough to characterize body, but there is another geometrical property that matter has: the inability for matter to occupy the same space as other matter, i.e. impenetrability. Therefore we'll add impenetrability to the essence of bodies, and say the essence of bodies is impenetrable extension." Since impenetrability was geometrical and they made impenetrability the cause of motion after a collision, geometry itself was therefore made the cause of motion, and everything could then safely be described mathematically. By re-explaining force as merely an effect of impenetrability, Euler, gushed "[Impenetrability] is the cause of all changes in the world. It is the master-spring which nature sets a going in order to produce all her wonders." Forces were thus deemed merely excess baggage, and d'Alembert boasted, "Arguments concerning measure of forces are entirely useless," thinking himself to have demonstrated that "we know nothing about movement except movement itself", or more simply, "we know nothing."

But, after setting up this geometrical monstrosity, they fraudulently realized they had to retain the property of mass, since they kept the bodies around, which they could then never explain having thrown out Leibniz's concept of force. Disembodied chunks of impenetrable extension could not explain physical properties of bodies, and they were led from one absurdity to another, since mass is physical not mathematical.⁴⁷

Lastly, as for the calculus, what was nothing but a political stunt during Newton's lifetime was turned into a devastating setback for mankind's understanding of the ontological significance of Leibniz's method of the infinitesimal. The Newton mathematics cult, led by their chieftain Euler, twisted

Newton's mere religious incapacity to conceptualize the principle of the infinitesimal, into obscuring its incommensurable distinction with infinite series. Euler was helplessly Newtonian in this regard, and employed infinite series to describe transcendental curves and functions, and anything else that was set before him.⁴⁸ Euler refused to grasp the ontological nature of physics over mathematics, as seen in the way he missed Leibniz's treatment of the ontological, inverse function characteristic of the catenary, over the lower geometric quadratures.⁴⁹

Despite its overwhelming incompetence, through the dictatorial imposition of the religious belief, supported top down by the Venetian oligarchy, through French, German salons, and beyond, this myth and religion of Newton was able to be imposed upon almost every scientist in Europe by the end of the 18th century, despite the fights waged by great German Renaissance leaders and Leibnizians, Abraham Kaestner, Moses Mendelssohn and their colleagues.

Conclusion:

Having concluded our tale of Leibniz's overthrow of the Sarpi model against the nation-state, and Venice's reaction to Leibniz's mind, we turn in conclusion to the understanding to be gained from that tale for citizens now of the present day.

After Conti's success in subverting creativity on the continent of Europe, the subsequent period of history can be characterized as an unfolding of the principles demonstrated in the preceding. Out of Venice's reaction to Leibniz's outflanking of the Sarpi model, arose a continued struggle between two principal methods.

One is characterized by what became the British Empire in 1763⁵⁰ and its method of controlling nation-states through a particular version of Sarpi's model of empiricism, and the other by the continued existence and potential of Leibniz's mind expressed through the creation of the United States of

America, which had developed outside of the Sarpi model since 1620.

In concluding this report, the implications of the preceding tale are used to clarify the way to view these two main guiding processes which determined all subsequent events over the next two and a half centuries to the present, those two dynamics of the method of the British Empire, versus the Leibnizian American System. By these means, the most important considerations for releasing society from the continued belief in what is in fact a bankrupt empire of monetarism today, and the immediate action to the contrary in the direction of real science and economics, is quickly accessed for the attentive reader.

The Victims of Popular Opinion

By 1763, Venice's reaction against nation-states had taken the form of an actual British Empire, this time ruling their colonies through a method embedded in Sarpi's model of empiricism, re-summarized from the beginning of this report:

- 1) Through Sarpi's assertions that, "Essence and universality are works of the mind," that "Universals...have no existence whatsoever...What do exist are bodies, extended and shaped...delimited by surface, line and point...having existence for" no other reason than, "the benefit of its own matter," human knowledge is limited to pure extension, which served to define the relation between the mind and the nature of actions of non-living, living, and cognitive physical objects in the universe, to be one of purely sense perception.
- 2) From this, Sarpi redefined causes, writing that "there be no causes that are not effects", explaining all things as a consequence of an infinite series of mechanical kinematic effects, and similarly came up with a false notion of law or cause, not intrinsic to an unseen organization or dynamic, but

only” laws” of descriptive effects. Mankind is relegated to using the learned formulaic descriptions of the senses as statistical knowledge to foresee “future events based upon constant repetition of events past.”

- 3) Since it is only these kinds of laws which mankind can hope for, in a universe which contains and consists of no universals whatsoever, Sarpi defined the creator, the created and creation itself, as irrational and unknowable.

- 4) And man is thereby reduced and advised by Sarpi to play the role of beast: “Do not follow opinion that wears the title of truth, but rather opinion that wears the title of pleasure or usefulness.....The end of man, as of every other living creature, is to live...simply live in the here and now.”

Conti’s networks spawned social doctrines that were consistent with this model, one in particular which argued in the late 1750’s, under the growing popularity of Conti’s version of Newtonian philosophy of pure sense, that man’s society is not and cannot be governed by ideas: Adam Smith’s Theory of Moral Sentiments. A clear understanding of this system makes plain the way in which to understand the menace that became Venice’s monetarist weapon against the nation-state.

Thoroughly consistent as a direct application of Conti’s Newtonianism, and thus the Sarpi model, the sophistry of Smith was to discuss people’s sentiments and feelings outside the context of the human ideas which bound and guide society, and man’s nature as creative.

Smith described that man learns how to behave and act from being conditioned by external sense experience as the standard of truth, and observing what is popular. Like Newton’s non-existent occult attraction, the mechanism by which Smith constructs his entire system of human society, the mechanism which is supposed to be the “cause” of every sentiment encountered in society, is through the assumption

that man is ruled by popular opinion as truth, by means of an imaginary point of cultural equilibrium, or what he called the “Impartial Spectator,” which trains man through his pure observation of the external world how to act and adjust to get approval.

We first discover the supposed self-evident truth of the external senses as what other people sympathize with, what is popular, and what will make us feel good. We observe what we can sympathize with others outside ourselves. With our sense of what we need to do to become popular and fit in, truth becomes only what is socially acceptable, and the goal of every person nothing but to seek and gain approval from others, which is obtained by following that learned sense of popular opinion. Since man’s mind is asserted as only an awareness of his feelings which learns to adjust to the feelings of others by observation, man does not have reason that is capable of tapping into and transmitting guiding cultural dynamics. Smith reduces reason to the clever ability to follow the “Impartial Spectator” to get ahead socially and be liked by others to fit in.

Restating and summarizing, like Sarpi and Conti’s Newtonianism, it is the sum of the interaction of seemingly self-evident epicurean particles, known only as the personally experienced transmission of feeling states from one person to another, where each person is regulating their own expression by an imagined idea of a standard for his externally observed sense perceptions, that constitutes society. And like Sarpi’s system, it sophisticatedly leaves out the context of the ideas which occur and guide man’s actions, of which actions ones sentiments and feelings are merely effects; Smith took those effects and constructed a system upon them.⁵¹

After 1763, the new British Empire needed a new method of controlling their colonies and potential adversaries in Europe without need of imperial troops. Especially by 1776 it was clear that a rigorous sophistry would have to be developed in order to convince the citizens of sovereign nations to imagine they had freedom of their own bodies, but to continue to

submit their freedom to follow a reasoned out plan of government for their economy, i.e. their liberty, over to an exterior belief created by the continued masters of the monetary system.

This was found in the next part of the Theory of Moral Sentiments where Smith then relieves his readers of any responsibility for the future or acting beyond one's own selfish desires, by stating that although his assertion is that we are incapable of governing the ends of society and only acting for our immediate pleasures, his "great discovery" was that it was nature's secret design to make us this way, and therefore one can be selfish without worrying about the consequences since the economy of society is beyond our comprehension.

"The produce of the soil maintains at all times nearly that number of inhabitants which it is capable of maintaining. The rich only select from the heap what is most precious and agreeable. They consume little more than the poor, and in spite of their natural selfishness and rapacity, though they mean only their own conveniency, though the sole end which they propose from the labours of all the thousands whom they employ, be the gratification of their own vain and insatiable desires, they divide with the poor the produce of all their improvements. They are led by an invisible hand to make nearly the same distribution of the necessaries of life, which would have been made, had the earth been divided into equal portions among all its inhabitants, and thus without intending it, without knowing it, advance the interest of the society, and afford means to the multiplication of the species." [emphasis added]

This cultural model created by Smith was morphed into a purely identical system for so called economics in order to beat back what arose in 1776. Smith's 1776 The Wealth of Nations was nothing but an application of the evil social doctrine which was spawned from Conti's networks⁵² in Smith's 1759 publication of the The Theory of Moral Sentiments.

The Popular Way to Destroy Nation-states

As an application of that social doctrine, the fraud of the The Wealth of Nations is based on the same axiomatic structure of the Sarpi model and his followers.

- The corollary to dismissing human ideas bounding society, nations, the actually existing entities of the Westphalian system, are sophistically absent from his book, their existence left out entirely, therefore denying the existence of the governing dynamics which determine the success of the economy.
- The essence of the economy is not the applications of human ideas through technology, but mathematical extension, descriptions of the monetary values of the flow of goods, dismissing the physical causes of what is being exchanged. Smith and his followers treat “principally of the effects of the exchange of matter, instead of treating of productive power. And as they made not the productive power, and the causes of its rise and fall in a nation, the principal object their inquiry, they neither appreciated the true effect of the different component parts of productive power, nor the true effect of the exchange of matter, nor of the consumption of it.”⁵³[emphasis added] The exchange is given a self-evident value outside the productive powers of labor and cognitive context of the human systems in which they flow, rendering the economy no longer a human economy.
- Since a doctrine of mathematical extension is made the nature of the economy, economy is deemed as only statistically knowable but scientifically unknowable, guided by the invisible hand of the The Theory of Moral Sentiments, now re-emerging in the the pages of The Wealth of Nations, “He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it...he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of

his intention...By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good...."[emphasis added] All of these actions of the individuals buying and selling, is guided by this invisible hand, just as the commerce of sympathies was guided by the "Impartial Spectator".

That in sum is the entire system of modern day monetarism, the social doctrine as the elaborate backdrop, as the empiricist religion of usury that allows for The Wealth of Nations to be tolerated. From this carbon copy of the Sarpi model once again, we find the consequent religious belief in the self-correction of the market, and that looking out for one's personal wealth leads to the greatest good.

The British Empire's method, with Adam Smith playing role as the available sophist for the job, was to make the individual purchaser and the flow of his money, as somehow, the cause. Rather than a reasoning process of human government guiding the application of scientific principles, economy is reduced to that kinematic interaction of individuals buying and selling, which is then itself reduced to monetary flows, seen then as the mysterious "cause" of everything in the economy itself, and seen to be made important by adding mathematics to descriptions of the money used in the buying and selling. Like the inverse square law of Newton, what is an effect of a dynamic process of the nation-state as a whole, that "market" was turned into something in and of itself.

Smith's work was a witting attack by monetarist interests of Venice's new British Empire against the culture of nation-states, in order to get them to accept an economic doctrine that would in effect destroy those nations. None of Smith's axioms have ever been believed by the monetarist interests in the legacy of the 1763 British Empire. The social tolerance of the popularity of being seen believing in the axioms that destroy ones nation, is the intended effect. While citizens are busy looking at the market, their real economy is destroyed

behind their back. The monetarist interests of today's doomed British Empire don't believe in globalization, they enjoy the effects of duped nations in adopting the lie and belief in it. Alan Greenspan explicitly stated that his derivatives bubble, now exploding today, was the new "self-regulating invisible hand".

The Immortality of Leibniz's Mind

In contrast to the ill destination which Europe took in the aftermath of Conti's Newtonianism, the Venetian legacy of monetarism is nowhere to be found within the Constitution of the United States. Rather than the oligarchical peasant minded culture of Smith, who would easily secede their sovereignty over to the image of wealth in order to have the honor of bowing, the United States arose from the voluntaristic efforts of mankind and a conscious sense of confidence in the existence of ideas.

Our culture is based on that celebrated fact, that we don't say "yes sir" to false images of authority. We act according to the spirit of society to change the direction of mankind. Out of this crystallized a sovereign credit system by the end of the 17th century, as the means for such willful actions of change, a credit system made to be guided by reason instead of statistics, as the principle created to govern the relations of its citizens.

Then, in the course of its development, as Leibniz's battle with Venice had both distracted and prevented Venice from crushing this growing republic, Benjamin Franklin arose out of that culture to design this U.S. republic according to the Leibnizian concept of a citizenry possessing true liberty, the power of following reason, and through his own personal scientific societies and other methods, ensured the happiness of educated discovery guided by reason. Just as was implicitly Leibniz's dynamics defined in his refutation of Descartes, citizens possessing true liberty tap into the principles of the society which have been discovered, and the principles and

values of the nation-state, in order to act and continue developing that society.

The power of our republic only became fully wielded however, by Alexander Hamilton's courageous and relentless efforts against the popularly held opinions which existed in the colonies.

Precisely what Sarpi and Smith denied to exist in their models, the powerful existence of nations as physically effective ideas⁵⁴ was enunciated in Hamilton's poetic grasp and communication of the new idea that could bound the sovereignty of the colonies of 76' together in 1789. Hamilton discovered that the ability to conceptualize a unified process acting as a whole, rather than its parts, was where the authority and credit came for the existence of a union, as expressed through such actions as his creation of a national debt to unify the nation with a national bank in 1781, the latter which ensured the victory of the revolutionary war.

“In proportion as the mind is accustomed to trace the intimate connexion of interest, which subsists between all the parts of a Society united under the same government—the infinite variety of channels which serve to Circulate the prosperity of each to and through the rest—in that proportion will it be little apt to be disturbed by sollicitudes and Apprehensions which originate in local discriminations. It is a truth as important as it is agreeable, and one to which it is not easy to imagine exceptions, that every thing tending to establish substantial and permanent order, in the affairs of a Country, to increase the total mass of industry and opulence, is ultimately beneficial to every part of it. On the Credit of this great truth, an acquiescence may safely be accorded, from every quarter, to all institutions and arrangements, which promise a confirmation of public order, and an augmentation of National Resource.”[emphasis added][15]

Hamilton came to the realization that the authority of the scientific truth of the existence of man's creativity, a creativity defining the universe as reasonable, is that which lies behind

the authority of acting on the sovereignty of a nation, as a nation. When the nation acts as a nation, it acts as a whole, generally and not locally, and the authority of the government comes from citizens which are capable of that expression. Hamilton made that conception the cornerstone of the US Constitution, and related arguments for the regulatory powers of Congress against Smith's "let it alone" approach to the economy.

"It is therefore of necessity left to the discretion of the National Legislature, to pronounce, upon the objects, which concern the general Welfare, and for which under that description, an appropriation of money is requisite and proper....The only qualification of the generality of the Phrase in question, which seems to be admissible, is this—That the object to which an appropriation of money is to be made be General and not local; its operation extending in fact, or by possibility, throughout the Union, and not being confined to a particular spot. No objection ought to arise to this construction from a supposition that it would imply a power to do whatever else should appear to Congress conducive to the General Welfare." [15]

The American System of Hamilton consequently centered around Hamilton's successful organizing for and drafting of the relevant economic aspects of the U.S. Constitution which could unify the colonies into an efficient active union of states with the power to organize the economy as one unified cognitive system. Rather than Newton's witchcraft applied to economics, Hamilton's American System was the augmentation of the principle of Leibniz's Academies of Science with the power of the sovereign credit system, accomplished by means of his discovered regulatory powers of government needed to support the credit of a sovereign banking system, powers which could guide the continual upward expansion of the economy through the promotion of technological application in infrastructure and production.

Subsequent patriots of nation-states have always understood that the market, the buying and selling of goods for money by

individuals, is nothing but an effect of the general intentional progress by the willful actions of its citizens toward the chosen destiny of the nation as a whole, and occurs in the context of the productive powers of labor. It is the ability to control and guide those productive powers of labor which come about through willful promotion of scientific advancements that is a true economics, as opposed to monetarism. Each nation has its own particular process of development, which citizens in those nations must take responsibility to guide. The power of a government is measured qualitatively by those citizens who take such responsibility.

It wasn't until Lyndon LaRouche made the unique discovery in the middle of the 20th century of the fundamental truth that such willful transformations in technology were to be integrated into a non-euclidean, non-Newtonian, essentially non-empiricist method of investigation: the science of physical economy, turning Hamilton's American System into an explicit science of Leibnizian dynamics. LaRouche observed early on that the relation of infrastructure and production in an economy is not one of a linear relationship, but must be lawfully transcendental. Such lawful transformations would reflect the anti-entropy found in non-living physical systems such as the anti-entropic life cycles of stars and galaxies, the principles of living systems, and cognitive discoveries. He discovered that as a reflection of the physical principles and discoveries which shaped the economy as a whole, those lawful transformations therefore must echo the characteristic non-linear transformations of creativity itself, in the platonic sense of the higher hypotheses, transformations that are not found in any of the preexisting axioms or axiomatic systems.

Rather than the false view of economy, the reality of the real economy in LaRouche's Physical Economy is as the same form of reality which Kepler dynamically defined for the case of the solar system, the active physical principles that bound and generate the effects of the system.

Rather than describers of monetary profit, all real economists have been in the tradition of the American System, acting as essentially engineers, planning out what was needed for the nation, how much production we had of certain goods, and how much investment we needed of infrastructure and technology to service the production of goods, and what the population needed to increase their living standard.

The economic scientist takes the step further of measuring the principle involved in effects of technology in increasing manufacturing output. He observes the relation between the application of a principle through technology in changing the field of potential in which production operates, such as the electric motor's application to production. The application of the electric motor had the effect of an increase in output, but it was all the changes in the quality of the work place and related non-linear transformations of the new principle which factored into the quantitative increase in output; it was an increase in the living standard of the worker, and increase invention of the worker, not merely an increase in the output of production.

By conceiving of a physical economy, the baseline for an economic scientist or patriot, is to make sure there is an affirmative answer to the question whether the total required inputs into the production and infrastructure of a society, leaves that society with the cognitive labor power left over to invest in maintaining increasing rates of technological advancements in the area of efficient use of society's existing resource bases, which takes place in technological breakthroughs in machinery and new inventions, and also advancements toward utilizing new resources, as the required full usage of the uranium and thorium cycle, and future breakthroughs in fusion, imply today.

Action Now

Today, the belief in monetarism and Adam Smith, which played the role of determining factor in the world economy

since the death of FDR, has brought world, technological potential far below the level needed to support the continued existence of civilization. The increase in productivity in an economy from infrastructure is an effect; the cause of the effect must always be understood as the continued act of investment by government. Unless that act is continually carried out, the effect will eventually die out, and cease, as we are seeing today.

The positive aspect of today's world, is that Lyndon LaRouche has called the bluff on the currently dead monetary system that it is presently, nakedly bankrupt, whose carcass has been carrying the world toward a global Weimar style hyperinflation since July 2007. The power of the monetary system therefore only continues to exist in the continued belief in monetarism itself, whose roots have been demonstrated in this report. Today it is only this continued belief which stands in the way of Lyndon LaRouche's economic alliance of sovereign nation-states for a new global credit system.

The shortcut in freeing the nation-states of the world from that belief is the consequently simple realization that arguments of the people who defend monetarism or explain economy as based on statistics are proven religious fanatics, whose arguments do not need to be dissected or refuted, as they refute themselves by simply being part of the dynamic of the Sarpi model of oligarchism. The related shortcut provided in this report to identify mankind's proper role in the universe is the quickest way to the rubbish bin, in which all empiricist scientific methods must be immediately disposed for the sake of civilization's survival.

With the clarity of the fallacy of all empiricist axioms, it is clear that the ability to make progress in outer space and master the principles which will continue to solve problems on earth, in its development of resources, medical infrastructure, transportation infrastructure, in short everything related to his living standard and population growth, will depend on reviving the method of science defined by Leibniz and Kepler,

of dynamics, of looking at systems as bounded by principles which determine lawfully the interaction of the system itself, and govern the changes of the system. It is consequently clear, that all explanations for anything that do not include a principle that governs the process, in other words, a sufficient reason, in the tradition of Leibniz, are inherently fraudulent, period. Science will never make any discoveries in continuing its big bang model of the universe which is inherently fraudulent, because it is mechanistic.

Leaving behind empiricism and employing LaRouche's revived method of dynamics, great scientific paradoxes that face mankind in these areas can and are waiting to be solved. Lyndon LaRouche has raised the implications, and Sky Shields has recently elaborated the necessity of such a method of dynamics to be applied to mankind's understanding of cosmic radiation, as aspects of higher unified processes interacting with Vernadsky's three phase spaces of the non-living, living, and cognitive.⁵⁵ Mankind's economy must reflect this kind of cognitive development, and the more mankind discovers about the lawfulness of the universe, both in the small and the large, we gain a greater will and ability to lawfully govern our own economy and development. It is a revival of science located here where lies the ability to revive the technological potential of mankind to a level that can support 7 billion and more persons.

As Leibniz's academies operated, Hamilton's economy was founded, and Lyndon LaRouche's science of economy created. The true wealth of nations is produced by the product of human creativity, and it is transformations which arise from this source that are their own purpose. A valid scientific basis must begin from the conscious promotion of human creativity for the sake of mankind's creative destiny in managing our present solar system, and then beyond.

In summary, the most challenging realization which must be made today is the inner meaning of science, a veritable "Purloined Letter". The purpose of science is discoveries, discoveries made for their own sake, and it is that mentality

which is the greatest enemy of the legacy of the Venetian system. The most celebrated truth of all is, that the existence of a human mind is measured through its effect, a human mind which therefore continues to live on, immortally, often in greater power than during the life of the mortal body which carried it.

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All other quotations not specifically referenced in the text are easily accessible by online text search or the author may be contacted at michaelanthonykirsch@gmail.com.

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Footnotes

¹This is the meaning of what is otherwise known as the trinity, in Christian theology.

2This is a summary of Sarpi's argument by University of Rome's Prof. Vittorio Frajese, from Sarpi the skeptic. State and church in Venice between 1500 and 1600, 1994. All other quotes in this and the next section are direct quotes from Sarpi's Art of Proper Thinking and Philosophical Thoughts. [1]

3In his Reflections on the Doctrine of the Universal Spirit, 1702, Gottfried Leibniz would later explicitly identify in detail, that Sarpi's concept here was based on a revival of the Averroist/Ockhamite philosophers Contarini and Pomponazzi.

4In all of this, astute minds may feel the presence of Adam Smith, Theory of Moral Sentiments, 1759.

5To simply underscore the fact that Sarpi and his servant Galileo were witting frauds, it is noted here that while Galileo was whoring for his reputation, Kepler showed the true causes of the motions of the heavenly bodies; and in so doing, he connected an understanding of an unseen principle with its effects, in such a way as to be able to forecast the future state of planets, as an expression of that cause, and simultaneously, experimentally demonstrated the universe to be made knowable through a method of looking for paradoxes in the sensory data which reveal the cause. In fact, Sarpi's leading enemy during his lifetime, was Kepler, and Galileo was used as much as possible to deter him, claim Kepler's fame for himself, and even attempt to kill him, as expressed in Galileo's death threat in 1624, declaring Kepler to be a heretic.

6In addition to organizing his various lodgings, Sarpi and Sarpi's *Giovani* sponsored Galileo financially, with Sarpi even organizing his payments. Fulgenzio Micanzio, Sarpi's personal secretary, paid Galileo directly, and after Sarpi's death permanently paid Galileo's Venetian pension, in addition to his costs of publication.

7This Bank was modeled precisely on the first central bank in history, the *Banco di Rialto* of Venice, established in 1585 after the victory of the *Giovani* faction in 1582.

8Sarpi's networks also set up shop in England in the court of James I in 1603. Sir Francis Bacon was in personal correspondence with Sarpi, and became the head of the Rosicrucian pagan mystics and alchemists who set up what would become London's Royal Society, while his secretary Thomas Hobbes would later travel to work directly under Galileo with his financial backer the Cavendish family in the 1630's.

9A crippling apparatus which locked the mind of the student into a dead universe of description, Descartes' Geometry created a definition of "knowable", as those things capable of being explained by algebra alone, algebra, which is nothing but a symbolic language describing the effects of real physical actions. Sarpi's universe again, where sense perceptible effects of actual complex physical actions are all we can hope to know, but this time, cloaked in mathematical formulas, empiricism became ever more deadly to an unwitting mind.

10The mind of those who became “educated” in Descartes and related empiricists, would never be able to make an original leap into the causes of any phenomena again, as the opportunity and spirit of such insight was too busy with following procedure, or simply too confused with the dearth of axiomatic rules to maintain any ability left to reason at all.

11The Venice-orchestrated hell of the “Thirty Years War”, destroying Germany and much of the rest of Europe, was ended by the statecraft of Cardinal Mazarin in organizing the 1648 Treaty of Westphalia. The principle of the sovereign nation-state was reaffirmed, and nations were to be respected as states that govern their own affairs, with the development of each as the basis for the growth and development of each other; although immediate operations against the nations were run, a semi-stable peace and strengthening of the Renaissance conception of the nation-state was achieved. In the 1660’s, the great nation builder, Jean Baptiste Colbert, became a power behind the throne of Louis XIV of France, and began acting according to the Treaty of Westphalia through major strides in physical economic development. Colbert’s school of economy was thereby intrinsically beyond the control of the popular empiricist promotions of “science” for the sake of abstraction, found in the fake science of Descartes and Galileo.

12For Descartes on the contrary all things were described as being some combination of x and y values, without regard to their physical nature; if that didn’t work, Descartes deemed them unknowable.

13This is a simplified description, as each physical curve has its own particular challenge of conceiving the integral from

the differential, which, are in no way direct, but require investigating the principled relationships contained in the differential.

14A full demonstration of Leibniz's method of describing and expressing "unseen principles" is beyond the scope of this report, but can be easily found by this author in the Dec 08 issue of *Dynamis*, *The Calling of Elliptical Functions*.<http://wlym.com/~seattle/dynamis/issues/december08.pdf>

15Leibniz understood that it was necessary to measure what would later be known as field by the circles of Carl Gauss, not sense perceptible, but definitely measurable. Leibniz's active matter was vindicated by the Gauss-Weber studies of electromagnetic potential, where matter is always inseparably connected with field. The future science of potential by Gauss, was essentially a revival and vindication of Leibniz's metaphysics and dynamics. Based on this axiom, Leibniz's laws of motion were actually able to explain motions of collisions, unlike Descartes laws which limited the cause of motion to their geometrical collisions themselves.

16Inelastic particles, otherwise known as Epicurean atoms, whose possibility he had demonstrated to be in contradiction with reason, through his law of continuity and other methods, such as his refutation of Descartes model of matter as intrinsically at rest.

17Leibniz was also taking such ancient Greek standpoints for his dynamics as the paradox of the instant in Plato's

Parmenides. Plato axiomatically forced the relation between principle and change, when dealing with what appeared paradoxical from the standpoint of Parmenides' method of mere descriptions of a state of motion or a state of rest, pointing to something which must guide the change from rest to motion, which was responsible for the paradox of the instant.

18Embedded in the methodology of Leibniz's dynamics and infinitesimal method of physical curves, is that distinct physical processes define themselves as separate distinct principles, just as Cusa had demonstrated, as opposed to the homogeneous infinitely extended box of Sarpi. The concept of space, time, and motion, were for Leibniz, and for all great scientists later such as, Gauss's school, Riemann and his followers Einstein and Vernadsky, particular expressions of the principles which were organizing the particular physical process under investigation. Characteristic properties are investigated in order to come to an unseen organizing principle, and it is the force of this principle which defines a particular state of existence, which is called space, time, or motion. Actions themselves define the universe from the inside, and it is the goal of the human mind to be able to live inside that universe, by using assumptions and discoveries as merely stepping stones to ascend to a clearer understanding of what governs a particular phenomenon or area under investigation. Practically speaking, of such stepping stones, there are an array of principles governing and interacting with the principle of life, currently under investigation, coming from galactic and super galactic phenomena, such as cosmic radiation, which are active principles, and necessary to unveil the way in which mankind must increase his mastery over his present solar system and beyond.

19English Prime Minister Benjamin Disraeli, grandson of a Venetian Merchant wrote as much in 1844: "The great object

of the Whig leaders in England...in 1688, was to establish in England a high aristocratic republic on the model of the Venetian. William III...told the Whig leaders, "I will not be a Doge." The reign of Anne was a struggle between the Venetian and the English systems... George I was a Doge; George II was a Doge...George III tried not to be a Doge...but he could not rid himself of the Venetian constitution."

20Newton immediately proffered his niece for sexual favors to Montagu in payment for the appointment, and for extra credit, as Warden of the Mint Newton personally advocated the death penalty and torture for petty thieves of coin wherever possible.

21Her Husband, the Duke of Brunswick, had died in 1696, putting her next in line.

22This was an accusation that Leibniz had not discovered the principle of the infinitesimal calculus but had taken it from Newton.

23This is known as Newton's *Commercium Epistolicum Collinii & aliorum, De Analysi promota*, his "official" ruling from the Royal Society of Leibniz as plagiarist. The rant, being issued in April 1712, was later printed and distributed more generally in the spring of 1713.

24Over 1696-1716, Leibniz had five meetings with Peter the Great, on two occasions for weeks at a time, and was in constant correspondence.

25In Newton's 1714 *An Account of the Book entitled Commercium Epistolicum Collinii & aliorum, De Analysis promotâ*, Newton exposed himself, among similar examples: "By the help of the new Analysis[read: infinitesimal calculus] Mr. Newton found out most of the Propositions in his *Principia Philosophiæ*: but because the Ancients for making things certain admitted nothing into Geometry before it was demonstrated synthetically, he demonstrated the Propositions synthetically, that the System of the Heavens might be founded upon good Geometry. And this makes it now difficult for unskilful Men to see the Analysis by which those Propositions were found out."

26Just as Newton had botched his debates over plagiarism of *Light* with Huygens and Hooke, and reckless bullying, theft, and suppression of Royal Astronomer John Flamsteed's work.

27The subtle inconsistency instantly exposed to Leibniz Conti's character and Leibniz was on to his agenda, noting his miraculous conversion to Newtonian philosophy. "He does not appear to have fixed principles and is similar to a Chameleon who takes the color of the things which it touches."

28What evidence against Venice was in his broader history of Europe relating to the division of the churches, which Leibniz had sought so long to unify, and which was Venice's basis for continuous war and friction between nations? What other

secrets concerning the House of Este's campaign against the Renaissance did they want buried?

29“God's Holy One”[11]

30See also footnote 1 and the sentence to which it refers.

31Isaac Barrow had held the Lucasian Chair of Mathematics at Cambridge, and after tutoring Newton in infinite series, theories of light, and sponsoring his alchemy, Barrow dumped his chair to him in 1669, wanting to move on to other things. When Newton was forced to teach something in order to keep his chair, no one showed up to his second lecture, and subsequently, after mumbling to an empty room a few times, Newton ceased teaching anything, whatsoever, altogether.

32Later in 1716, when Whiston applied for a membership to the Royal Society, Newton, the President, threatened to resign if he came on. Politically, it would have been a serious damper to Conti's operation in full swing that year.

33As should become necessarily, painfully clear to the reader in what follows, Sarpi's model is what Newton was made to be, and it is no coincidence therefore, that the cult that promoted him put all of its effort into formulating the inverse square law, which is not a law, or a principle at all. In truth, that kinship is all that need be said about the book itself; however, dealing with the specific way it was put forward is necessary

for understanding the broader historical and scientific principle being addressed in this report.

34A fact even admitted after Newton's death by Henry Pemberton, one of his editors.

35According to one of his family members, Johnathon Swift had described Newton as the worst companion in the world, and that if you asked him "he would revolve in a circle in his brain, round and round and round," (and here Swift described a circle on his own forehead), before he could produce an answer. "The Dean [Swift] used to also tell of Sir Isaac, that his servant having one day called him to dinner, and returning, after waiting some time, to call him a second time, found him mounted on a ladder balanced against the shelves of his library, a book in his left hand, and his head reclined against his right, sunk in such a fit of abstraction, that he was obliged, after calling him once or twice, to actually jog him, before he could awaken his attention. This was precisely the office of the flapper", of which Swifts floating island of "La puta" is peopled with thousands of Newtons, each of whom are awakened from their mathematical daze by flappers.

Swift had captured the characteristic, that along with being a specialist in alchemy, black magic, and biblical prophecy, Newton had a form of autism which made him incapable of discovery, but a perfect calculator, and so much so, that he could hardly socialize in any normal manner, operating only in very controlled environments. When Montagu later made him President of the Royal Society, he altered the form of meetings so that there was no open discussion, and one could only speak if Newton called on them; behind closed doors he would flaunt his sponsored status to those he thought beneath

him as in his beastly acts toward those such as Flamsteed; but, in public, such as his stints in Parliament, Newton never said a word, as under confrontation he couldn't function; the two cases of him opening his mouth in the public forum of Parliament was to one, ask someone to shut a window, and two, when he read from a piece of paper, but when asked for clarification as to what he had read sat frozen in silence.

36The only source of Newton's account of his early discoveries related to what he mistakes for the calculus came from himself. It wasn't until after Leibniz's calculus was published in 1691-92 by John Bernoulli, Guillaume de L'Hopital, and Pierre Varignon on the continent, that John Wallis claimed Newton had something similar with infinite series and quadratures. Then, with the war on against Leibniz, in preparation for, and building up Newton against Leibniz, a supposed exposition of Newton's fluxions was put forward by someone else in 1704, which, in addition to a mess of quadratures, faked to be original, copying Leibniz's work and changing the notation. No one in Newton's lifetime outside of England ever believed Newton discovered anything in the calculus besides a possible twist on Barrow's quadrature using infinite series, with which he never accomplished anything further, having taken up other interests, as we have seen. And, this is despite the fact that Leibniz sent him a full account of his differential calculus in 1677 after receiving merely a cryptic note about infinite series and containing the mere word "fluxion" and "tangent" from Newton in 1676.

37In Leibniz's metaphysics, or physics of the mind, pervading all of his discoveries and correspondences, he explicitly revived and stated what is implied and guides all human reasoning, that there must always be a sufficient reason why something is so, rather than otherwise. Leibniz would later himself write of the Leibniz-Clarke correspondence, that "the supporters of Mr. Newton find themselves," in the necessity,

“to deny the great principle of the need for a sufficient reason, by means of which I beat them into ruin.”[13]

38Leibniz had pointed out after the 1st edition, that the Newton crew had “revived the occult qualities with the idea of attraction”, since the “attraction of bodies, properly so called, is a miraculous thing, since it cannot be explained by the nature of bodies.”

39I frame no hypotheses.

40In exposing Newton as a Socinian, one of many anti-trinitarian cults created by Venice against the Council of Florence, Leibniz had taken note that “Newton’s” Optics presented the universe as a winding down clock, when it said that “some very small irregularities, which may have arisen from the mutual actions of the planets and comets one upon another...will in length of time increase more and more, till the present system of Nature shall want to be anew put in Order by its author.” Leibniz pointed out that the implication of creating a Creator who, as Leibniz said, would need to “wind up his watch from time to time”, was merely to uphold the political agenda of a belief in an unknowable, irrational universe, so as to avoid having to use one’s reason, and therefore to destroy human creativity. This view asserted here in the Optics, was later defended by Lord Kelvin and Rudolph Clausius, who again arbitrarily asserted the exact same view, only through a new venue, that of the study of heat powered machines. These political doctrines of entropy lead to conceptions of the universe that tolerate population reduction, mass murder, environmentalism, “zero growth” economies, and the like; they are not scientific theories, they are religious beliefs.

41Cf. Descartes Principles of Philosophy, Part I, Principles of Human Knowledge. “The chief principles of human knowledge seem to me to be contained in...the knowledge of a certain corporeal nature, or one extended, divisible, mobile, etc.; and also the knowledge of certain sensations which affect us, for example, pain, colors, flavors, etc.”

42In his last letter in a series to Reverend Bentley, later one of Newton’s handlers of the second Principia, in February 25th, 1693, Newton explains more about his idea whether or not gravity is an innate property of matter itself. “Tis inconceivable, that inanimate brute matter should (without the mediation of something else, which is not material) operate upon and affect other matter without mutual contact; as it must, if gravitation, in the sense of Epicurus, be essential and inherent in it. And this is one reason why I desired you would not ascribe innate gravity to me. That gravity should be innate, inherent, and essential to matter, so that one body may act upon another at a distance through a vacuum, without the mediation of anything else, by and through which their action or force may be conveyed from one to another, is to me so great an absurdity, that I believe no man, who has in philosophical matters any competent faculty of thinking, can ever fall into it. Gravity must be caused by an agent acting constantly according to certain laws; but whether this agent be material or immaterial, is a question I have left to the consideration of my readers.” Whiston relayed the fact after Newton’s death, that Newton always thought attraction was caused by the “Power of the Deity.” This is the literal basis for the belief in Adam Smith’s force that makes the market “adjust itself”, so that everything works out in the end; a fact making the whole lot of believers in the market economy a bunch of religious fanatics.

43Conti personally fashioned an image of Newton in the early 1720's, cleaned from true face which Leibniz had unveiled before his death. For the purpose of creating a general philosophy of pure mathematics, Conti devoted many of his writings to attempting to make the case that Newton did not share the beliefs which Leibniz had exposed, which, as we have seen, if allowed to be generally connected with Newton, would have ruined him for Conti's following project. As one example of this cleaning Newton's attraction into a pure mathematical formula, he had written that considering hypotheses isn't it better, "to be satisfied with the one which...in a strict sense, is not considered a hypothesis." Having explicitly defined hypothesis as a math formula, he continued that concerning the inverse square law, "so far we have been fairly lucky. Because this hypothesis explains more than any other. The more we examine nature, the more we observe, the more the hypothesis is confirmed", so there is no reason to "lose ourselves in the abyss where all is equally dark and dangerous," by connecting them to Newton's force of attraction, but his more general sophisticated aim, real causes. Badaloni, *Un abate libero pensatore tra Newton e Voltaire*, 1968. (Quotations translated by Quincy O'Neil.)

44Both of which as we have seen were part of an empiricist operation and not cause for celebration among the wise, but here this is not the point.

45Leibniz had disproved the existence of infinitely hard particles when refuting Descartes' inconsistent (and silly) laws of motion which lead to infinite jumps in motion and direction of objects, which is in contradiction to reason, since to go from one velocity to another, all intervening velocities must be passed through. While elastic particles would be capable of continuous transitions, infinitely hard particles would follow Descartes' laws making impossible discontinuous transitions, and therefore infinitely hard particles are, impossible. In a

long diatribe against Leibniz in 1746, Maupertuis simply asserted a sophism, saying that although the law of continuity states that a body has to go through all the velocities in between two different velocities, “how do we know that there isn’t an infinite jump between each one of those velocities?” and therefore there is nothing wrong about going from motion to rest instantaneously, nor changing directions instantaneously.

46Euler would attempt to give his doctrine more class and credibility, following d’Alembert in the late 1740’s and in his 1760 letters to an unfortunate princess.

47By ridding science of causes, they were faced with an impossibly complicated mess of formulas, but, for d’Alembert, these contradictions came with the territory of following Newton. He was explicit: physics is only a branch of mathematics. To those who criticized the fact that his whole mechanics was based on non-existent hard particles, he’d literally say, “we’ll I’m just doing mathematics, not physics,” or rather, “I’m just masturbating, don’t look over here”.

48Rumor has it, even his children.

49Gauss’s later work on elliptical functions, picked up on precisely this issue. and rather than Euler’s infinite series description, it focused on ironically identifying the projection of the higher process, by how the higher process itself projects. See, The Calling of Elliptical Functions, Dynamis December 08, by this Author. <http://wlym.com/~seattle/dynamis/issues/december08.pdf>

50At the close of London's Venetian style orchestration of a war gripping all of Europe, except England, they robbed France of Canada and India, took the East Indies from the Dutch, and London became the operational seat of a new world Empire, restoring the now disembodied Venetian usury system to a similar position of control it had before the 14th century Dark Age.

51The basis for what is called behaviorist economics today of Obama White house fame, is based on these axioms.

52See, Lyndon LaRouche, How Bertrand Russel Became an Evil Man, 1994

53Frederich List, Letter 4, of his Letters to James Ingersoll 1811, in his attempt to "lay the axe at the root of the tree, by declaring the system of Adam Smith and Co. to be erroneous—by declaring war against it on the part of the American System."

54Alexander Hamilton and American System follower, Frederich List, made a mockery of the followers of Adam Smith who attempted to claim that nations were nothing more than the sum of the individuals living within their territorial borders, and the word nation a mere grammatical contrivance, by pointing out the fact that while "the names bar, yeomanry, mob are grammatical beings" that couldn't prosecute a law suit under that name in court; however "the American nation can." "A being which elects presidents and representatives, which possesses a navy, land, and debts; which makes war and concludes peace; which has separate interests respecting other nations, and rights as well as obligations respecting its members, is not a mere grammatical being; it has all the qualities of a rational being and real existence."

Leonardo Dicaprio and the Game of Thrones Venetian Conspiracy -

The Political Economy of Slavery, The Venetian State, Petrarch versus Aristotle, Venetian Foreign Policy - The Parasitisation of the Created Decline and Destruction of Larger States, the Venetian Destruction of the Renaissance, Venice and Genoa Unite, the Creation of the Jesuits, Sarpi and the Enlightenment.



Leo Dicaprio Mask

Leonardo wears a black Venetian mask of the Black Nobility.

THE GAME OF THRONES VENETIAN CONSPIRACY



Sometimes people reading the Truth get depressed by it.

For people with big hearts though, the truth gets them started with an Implacable Opposition to Absolute Evil.

The Battle of Armageddon can only be won by sufficient Angels to fight against the Demons.

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Address delivered to the ICLC Conference near Wiesbaden, Germany, Easter Sunday, 1981; (appeared in Campaigner, September, 1981)

Periods of history marked, like the one we are living through, by the convulsive instability of human institutions pose a special challenge for those who seek to base their actions on adequate and authentic knowledge of historical process.

Such knowledge can come only through viewing history as the lawful interplay of contending conspiracies pitting Platonists against their epistemological and political adversaries.

There is no better way to gain insight into such matters than through the study of the history of the Venetian oligarchy, the classic example of oligarchical despotism and evil outside of the Far East.

In the same way that the Venetians caused and parasitised the decline and destruction of great states, so we can see that the USA is currently being destroyed and parasitised.

Not only destroyed but also, previously raised up in the same way that New Venice invested in and raised up China. Only to suppress fusion power and parasitise her long decline and the decline of a NWO World.

So, how did they do this, not what they did which is normal history.

And they did all this through Diplomacy - meeting and talking to the prime movers of the Deep State - Since Roman times there has been the political show of bought and blackmailed Politicians and the Satanic families who manage them - and their coterie - bribing them, removing them, replacing them with their men.

Through the Media - Books, Television, Movies who keep society in line, fearful, and tell the what to think - Like Murdoch of Fox News who is a Knight of Malta.

Through Satanic secret societies within secret societies who provide their men for example the Freemasons, the Jesuits, the Council on Foreign Relations, Royal Institute of International Affairs at Chatham House, Bilderburgers, Club of Rome, Cini Foundation.

Through the Secret Services who provide Venetian advisors to terrorists like Genghis Khan supplied with money and arms and advisors to take over China and attack Europe. Who provide assassins like James Bond. Spying experts and the NSA to help with Bribery and corruption, to help with Political and Industrial Espionage. Who provide intellectuals like Paolo Sarpi to manage it all for the Venetian Deep State.

Such are the benefits of history..

Venice called itself the Serenissima Republica (Serene Republic), but it was no republic in any sense comprehensible to an American, as James Fenimore Cooper points out in the preface to his novel The Bravo. But its sinister institutions do provide an unmatched continuity of the most hideous oligarchical rule for fifteen centuries and more, from the years of the moribund Roman Empire in the West to the Napoleonic Wars, only yesterday in historical terms. Venice can best be thought of as a kind of conveyor belt, transporting the

Babylonian contagions of decadent antiquity smack dab into the world of modern states.

The more than one and one-half millennia of Venetian continuity is first of all that of the oligarchical families and the government that was their stooge, but it is even more the relentless application of a characteristic method of statecraft and political intelligence. Venice, never exceeding a few hundred thousand in population, rose to the status of Great Power in the thirteenth century, and kept that status until the Peace of Westphalia in 1648, thanks to the most highly developed system of embassies, of domestic and foreign intelligence, and related operational potentials.

As the following story details, Venice was at the center of the efforts to destroy the advanced European civilization of the eleventh and twelfth centuries, and bears a crushing burden of guilt for the ascendancy of the Black Guelphs and the coming of the black plague. The Venetians were the intelligencers for the Mongol army of Ghengis Khan and his heirs, and had a hand in guiding them to the sack of Baghdad and the obliteration of its renaissance in the thirteenth century.

The Venetians were the mortal enemies of the humanist Paleologue dynasty in Byzantium. They were the implacable foes of Gemisthos Plethon, Cosimo de' Medici, Leonardo da Vinci, Niccolo Machiavelli, and the entirety of the Florentine Golden Renaissance, which they conspired – successfully – to destroy. Venetian influence was decisive in cutting off the Elizabethan epoch in England, and in opening the door to the lugubrious Jacobean era.

Venetian public relations specialists were responsible for picking up the small-time German provincial heretic Martin Luther and raising him to the big-time status of heresiarch among a whole herd of total- predestination divines. Not content with this wrecking operation against the Church, Venice was thereafter the “mother” for the unsavory, itinerant Ignatius of Loyola and his Jesuit order. After the Council of Trent, Venice was also the matrix for the Philosophe- Libertin

ferment of the delphic, anti-Leibniz Enlightenment. Venice beat Thomas Malthus and Jeremy Bentham to the punch in inflicting British political economy and philosophical radicalism on the whole world.

Although Napoleon Bonaparte had the merit of forcing the formal liquidation of this loathsome organism during his Italian campaign of 1797, his action did not have the effect we would have desired. The cancer, so to speak, had already had ample time for metastasis – into Geneva, Amsterdam, London, and elsewhere. Thus, though the sovereign political power of Venice had been extinguished, its characteristic method lived on, serving as the incubator of what the twentieth century knows as fascism, first in its role as a breeding ground for the protofascist productions of Wagner and Nietzsche, later in the sponsorship of fascist politicians like Gabriele D’Annunzio and Benito Mussolini. The Venetians ran a large chunk of the action associated with the Parvus Plan to dismember Russia, and may well have been the ones who surprised everyone, including London, by unleashing World War 1 in the Balkans.

Most important, Venice is today through its Cini Foundation and its Société Européenne de Culture the think tank and staging area for the Club of Rome and related deployments. Venice is the supranational homeland of the New Dark Ages gang, the unifying symbol for the most extreme Utopian lunatic fringe in the international intelligence community today.

Get to know Venice. Then look back to the monetarist imbecility of Paul Volker, at the ideological fanaticism that radiates forth from the Bank of America, Chase Manhattan, the Bank for International Settlements and the rest. You will recognize the unmistakable putrid stench of a Venetian canal, where the rotting marble palaces of generations of parasites are corroded by the greatest cynicism and cruelty the world has ever known.

THE ORIGINS

In the Middle Ages the Venetians were known as the archetypes of the parasite, the people who “neither sow nor reap.” For the Greeks, they were the hated “frogs of the marshes.” In Germany, a folk tale describes the merchant of Venice as an aged Pantaloon who makes his rounds robbing men of their human hearts and leaving a cold stone in their place.

Closer to the essence of Venice is the city’s symbol, the winged lion of St. Mark, bearing the misleading inscription, Pax Tibi Marce, Evangelista Meus (“Peace be with you Mark, my evangelist.”) The chimerical winged lion comes out of the East, either from Persia or from China. The symbol is thus blatantly pagan, with St. Mark being added as an afterthought because of his alleged visit to the Venetian lagoons. To buttress the story, the Venetians stole St. Mark’s body from Alexandria in Egypt, and Tintoretto has a painting celebrating this feat.

The point is that Venice looks East, toward the Levant, Asia Minor, central Asia, and the Far East, toward its allies among the Asian and especially Chinese oligarchies which were its partners in trade and war. This is reflected in a whole range of weird, semi-oriental features of Venetian life, most notably the secluded, oriental status of women, with Doges like Mocenigo proudly exhibiting a personal harem well into modern times.

Venice today sits close to the line from Lubeck to Trieste, the demarcation between NATO and Warsaw Pact Europe, roughly corresponding to the boundary between Turks in the East and Christians in the West, and still earlier between the Holy Roman and Byzantine Empires. Into this part of the northern Adriatic flow the rivers of the southern side of the Dolomites and the Julian Alps. The greatest of these is the Po. These rivers, around 300 A.D., made the northern Adriatic a continuous belt of marshes and lagoons about fifteen kilometers wide, and extending from the city of Ravenna

around to the base of the Istrian Peninsula, where the Italian-Yugoslavian border lies today.

In the center of this system was Aquileia, starting point of an important north-south trade route across the Brenner Pass to the Danube Valley and Bohemia. Aquileia was the seat of a patriarch of the Christian Church, but its tradition was overwhelmingly pagan, and typified by rituals of the Ancient Egyptian Isis cult. For a time after the year 404, Ravenna and not Rome was the capital of the Roman Empire in the West. After the extinction of the western empire, Ravenna was the seat of government of Theodoric the Ostrogoth, the court visited by Boethius. Later Ravenna was the capital of a part of Italy ruled by the Byzantines.

The islands of the lagoons provided an invulnerable refuge, comparable to Switzerland during World War II, for Roman aristocrats and others fleeing the paths of Goth, Hun, and Langobard armies. Already between 300 and 400 A.D. there are traces of families whose names will later become infamous: Candiano, Faliero, Dandolo. Legend has it that the big influx of refugees came during the raids of Attila the Hun in 452 A.D. Various areas of the lagoons were colonized, including the present site of Torcello, before the seat of administration was fixed at a group of islands known as Rivus Altus ("the highest bank"), later the Rialto, the present location of the city of Venice. The official *Ab Urbe Condita* is March 25, 721 A.D. Paoluccio Anafesto, the first ruler of the lagoon communities, called the doge (the Venetian equivalent of Latin *dux* or Florentine *duca/duce*, meaning leader or duke), is said to have been elected in the year 697.

The most significant fact of this entire period is that the whelp of what was later to become Venice survived and grew thanks to its close alliance with the evil Emperor Justinian in Constantinople, an alliance that was underlined in later years by intermarriage of doge and other leading Venetian oligarchs with the nobility of Byzantium, where a faction embodying the sinister traditions of the Roman Senate lived on for a thousand years after the fall of Rome in 476.

Venetian families are divided into two categories. First come the oldest families, or Longhi, who can claim to prove their nobility substantially before the year 1000. The Longhi include many names that are sadly familiar to the student of European history: Dandolo, Michiel, Morosini, Contarini, Giustinian (perhaps related to the just-mentioned Byzantine emperor), Zeno, Corner (or Cornaro), Gradenigo, Tiepolo, and Falier. These old families held a monopoly of the dogeship until 1382, at which time they were forced to admit the parvenu newcomers, or Curti, to the highest honor of the state. After this time new families like Mocenigo, Foscari, Malipiero, Vendramin, Loredano, Gritti, Dona, and Trevisan came into the ascendancy.

These families and the state they built grew rich through their parasitizing of trade, especially East-West trade, which came to flow overwhelmingly through the Rialto markets. But there is a deeper reality, one which even derogatory stories about spice merchants are designed to mask.

The primary basis for Venetian opulence was slavery. This slavery was practiced as a matter of course against Saracens, Mongols, Turks, and other non-Christians. In addition, it is conclusively documented that it was a matter of standard Venetian practice to sell Christians into slavery. This included Italians and Greeks, who were most highly valued as galley slaves. It included Germans and Russians, the latter being shipped in from Tana, the Venetian outpost at the mouth of the Don, in the farthest corner of the Sea of Azov. At a later time, black Africans were added to the list and rapidly became a fad among the nobility of the republic.

THE POLITICAL ECONOMY OF SLAVERY

During the years of the Venetian overseas empire, islands like Crete, Cyprus, Corfu, Naxos, and smaller holdings in the Aegean were routinely worked by slave labor, either directly

under the Venetian regime, or under the private administration of a Venetian oligarchical clan like the Corner, who owed their riches to such slavery. In later centuries, the harems of the entire Ottoman Empire, from the Balkans to Morocco, were stocked by Venetian slaves. The shock troops of the Ottoman Turkish armies, the Janissaries, were also largely provided by Venetian merchants. A section of the Venetian waterfront is still called Riva Degli Schiavoni – slaves' dock.

Around 1500, the Venetian oligarch Cristoforo da Canal, the leading admiral of the Serenissima Repubblica at that time, composed what he described as a Platonic dialogue concerning the relative merits of galley slaves: the Italians the worst, Dalmatians better, the Greeks the best and toughest of all, although personally filthy and repulsive. In the seventeenth and eighteenth centuries Venice had treaty relations with other states, like Bavaria, by which convicts were delivered to the Serenissima to work as life-long galley slaves.

Indistinguishable from slave gathering operation were piracy and buccaneering, the other staples of the Venetian economy. Wars with Genoa or with other powers were eagerly sought-after opportunities to loot the enemy's shipping with clouds of corsairs, and victory or defeat usually depended more on the success of the privateering than on the direct combat of the galleys, cogs, and soldiers of the battle fleets.

Piracy shades over imperceptibly into routine commerce. Through decades of treachery and mayhem, the Venetians were able to establish themselves as the leading entrepot port of the Mediterranean world, where, as in London up to 1914, the vast bulk of the world's strategic commodities were brought for sale, warehousing, and transshipment. The most significant commodities were spices and silks from India and China, destined for markets in Central and Western Europe. Europe in turn produced textiles and metals, especially precious metals, for export to the East.

Venetian production from the earliest period until the end was essentially nil, apart from salt and the glass manufactures of Murano. The role of the Venetian merchant is that of the profiteering middleman who rooks both buyer and seller, backing up his monopolization of the distribution and transportation systems with the war galleys of the battle fleet.

The Venetian approach to trade was ironically dirigistic. Venice asserted a monopoly of all trade and shipping in the northern Adriatic. The Serenissima's own functionaries organized merchant galley fleets that were sent out one or two times a year to key ports. The galleys were built by the regime in its shipyards, known as the Arsenal, for many centuries the largest factory in the world. They were leased to oligarchs and consortia of oligarchs at a type of auction. Every detail of the operation of these galley fleets, including the obligation to travel in convoy, was stipulated by peremptory state regulation.

In the heyday of Venice, galley fleets were sent to Tana and to Trebizond in the Black Sea, to Crete, Rhodes, and Cyprus on the way to Beirut in the Levant, to Tunis, Tripoli, Algiers, Oran, and Alexandria in North Africa, as well as to Spanish, French, and west coast Italian cities. Especially well-served was "Romania," the area roughly corresponding to modern Greece. Another galley route passed through Gibraltar on the way to Southampton, London, Antwerp, and Bruges.

Many of these galley ports correspond to continuing Venetian influence today. In every instance the Venetians sought to skim the cream off the top of world trade. Their profit margins had to be sufficient to cover a "traditional" twenty percent interest rate, the financing of frequent wars, and maritime insurance premiums, in which they were pioneers.

THE VENETIAN STATE

The tremendous stability of the Venetian state has fascinated historians. How is it possible to maintain the great power of

Venice for more than a millennium and a half without being conquered from the outside, and without significant upheavals from within?

Venice remained impervious to foreign invasion from the first settlement until 1797. The monolithic iniquity of Venetian state institutions was seriously disturbed no more than a half dozen times from within the city, and such incidents were speedily terminated by bloodbaths that restored stability rather than spurring more violence. This feature of the Venetian oligarchical system contrasts sharply with that of its rival, Genoa, where each regime from 1300 to 1500 had the life expectancy of an Italian government today. It contrasts sharply with the papacy, where the highest office was up for grabs every dozen years or less, and where humanist factions could sometimes prevail.

In Venice, the bloody resolution of internal faction fights within the oligarchy was suppressed to a minimum, and these energies were effectively sublimated in the depredation of the outside world. The raging heteronomy of each oligarch was directed outward, not at his factional rivals. In the typology of Plato's Republic, Venice is an oligarchy, "a constitution according to property, in which the rich govern and the poor man has no share in government," "the rule of the few, constitution full of many evils." This oligarchy has a residue of timocracy, of rule based on honor. But at the same time the Venetian regime was perversely aware of Plato's description of the swift transition from oligarchy to democracy and thence to tyranny, and against this evolution the patriciate took measures.

Plato notes in Book VIII of The Republic that a "change in a constitution always begins from the governing class when there is a faction within; but so long as they are of one mind, even if they be a very small class, it is impossible to disturb them." The threat of factionalization is located in the "storehouse full of gold, which every man has," and which "destroys such a constitution." The oligarchs "lay a sum of money, greater or less, according as the oligarchy is more or

less complete, and proclaim that no one may share in the government unless his property comes up to the assessment. This they carry out by force of arms, or they have used terror before this to establish such a constitution.”

Venice lasted as long as it did because of the effective subordination of the oligarchs and families to the needs of the oligarchy as a whole, by the ironclad delimitation of noble status to those already noble in 1297 and their male descendants, and by continuous terror against the masses and against the nobility itself.

All male members of the approximately one hundred fifty noble families had the permanent right to a seat in the Gran Consiglio, or Great Council, which grew to 2000 members around 1500 and thereafter slowly declined. The seat in the Gran Consiglio and the vote it brought were thus independent of which faction happened to be calling the shots at a given moment. The ins might be in, but the outs were sure of their place in the Gran Consiglio, and this body elected the key governing bodies of the regime.

The first of these were the one hundred twenty members, or Pregadi, of the Senate, the upper house which oversaw foreign affairs by choosing the Venetian ambassadors. In the middle of the fifteenth century, Venice was the first and only power which regularly maintained permanent legations in all principal courts and capitals. The Senate also chose five war ministers, five naval ministers (all called Savi), and six Savii Grandi, ministers of still higher rank.

The Gran Consiglio elected a Council of Forty, which was first devoted to budget and finance matters, later more to criminal prosecution. The Gran Consiglio chose three state prosecutors, who could and did sue any official of the state for malfeasance, although the doge was accorded the privilege of being tried after his death, with his family paying any fines levied. The Gran Consiglio also elected the doge himself, through an incredible Byzantine procedure designed to assure a representative choice. First, thirty members of the Gran

Consiglio were chosen at random, using colored balls whose Venetian name is the origin of the American word ballot. These thirty drew lots to cut their number down to nine, who then nominated and elected a new group of forty electors. These were then cut down by drawing lots to a group of twelve. This procedure was repeated several times, terminating with a group of forty-one electors of whom twenty-five could nominate a doge for the approval of the Gran Consiglio. Somewhat less complicated procedures were used to select a group of six advisors for the doge.

Most typical of the Venetian system is the Council of Ten, established in 1310 as the coordinating body for foreign and domestic political intelligence operations. Meeting in secret session together with the doge and his six advisors, the Ten had the power to issue a bill of capital attainder against any person inside Venetian jurisdiction, or abroad. If in Venice, that person was generally strangled the same night and the body thrown into the Canale degli Orfani.

The Ten had at their disposal a very extensive foreign intelligence network, but it was inside Venetian territory that their surveillance powers became pervasive: the contents of any discussion among oligarchs or citizens was routinely known to the Ten within twenty-four hours or less, thanks to the ubiquity of its informers and spies. Visitors to the Doge's Palace today can see mail slots around the outside of the building in the shape of lion's mouths marked *Per Denontie Segrete* ("For Secret Denunciations") for those who wished to call to the attention of the Ten and their monstrous bureaucracy individuals stealing from the state or otherwise violating the law. Death sentences from the Ten were without appeal, and their proceedings were never made public. Offenders simply disappeared from view.

The Venetian regime is a perverse example of the "checks and balances" theory of statecraft, and there were indeed a myriad of such feedback mechanisms. The *Savii Grandi* balanced the powers of the doge, who was also checked by his six advisors, while more and more power passed to the state inquisitors

and the chiefs of the Ten. The state attorneys acted as watchdogs on most matters, as did the Senate, and in times of crises the Gran Consiglio would also assert its powers. The Ten were constantly lurking in the background.

Almost all officials except the doge were elected for terms averaging between six months and one year, with stringent provision against being reelected to an office until a number of months had passed equal to the oligarch's previous tenure in that post. This meant that leading oligarchs were constantly being rotated and shunted from one stop on the *Cursus Honorum* to another: to Savio Grande to ducal advisor to state inquisitor and so forth. There was no continuity of the population of Venice; the continuity was located only in the oligarchy. In fact, the population of the city seemed unable to reproduce itself. Venice suffered astronomical rates of mortality from malaria and the plague – its canals, it must be remembered, were first and foremost its sewer system. The decimated natives were continually replenished by waves of immigration, so much so that the Frenchman Philippe de Comynes, an adversary of Machiavelli, could report that the population was mostly foreigners.

Internal order was entrusted to an intricate system of local control in each of the city's sixty parishes, meshing with an elaborate apparatus of corporatist guilds called the *Scuole*. This was supplemented by an unending parade of festivals, spectacles, and carnivals. Very few troops were usually stationed in the city.

So much for the phenomena. Reality was located in the fact that an elite of ten to fifteen families out of the one hundred fifty effectively ruled with an iron hand. Various Venetian diarists let the cat out of the bag in their descriptions of corruption and vote-buying, especially the bribery of the impoverished decadent nobility, called *Barnabotti*, who were increasingly numerous in the Gran Consiglio. The regime ran everything, and offices of all types were routinely sold.

This reality of graft was also known to Dante. The poetical geometry of Canto 21 of the *Inferno*, the canto of the grafters or Barattieri, is established by a reference to the Venetian Arsenal and the pitch used to caulk the hulls of the galleys:

As in the Arsenal of the Venetians
Boils in the winter the tenacious pitch
To smear their leaky vessels over again,
For sail they cannot.

The souls of the grafters are immersed in the boiling pitch, where they are guarded by the Malebranche, grotesque winged monsters armed with spears and hooks: a fitting allegory for the souls of the Venetians.

Dante visited Venice in 1321, acting in his capacity as diplomatic representative of the nearby city of Ravenna, whose overlord was for a time his protector. He died shortly after leaving Venice. The two explanations of his death converge on murder: one version state that he was denied a boat in which to travel south across the lagoon. He was forced to follow a path through the swamps, caught malaria, and died. Another version says that a boat was available, but that to board it would have meant certain assassination. Venetian records regarding this matter have conveniently disappeared.

PETRARCH VERSUS ARISTOTLE

The Venetian method of statecraft is based on Aristotle – the deepest Aristotelian tradition in the West. Long before the era of Albertus Magnus (1193-1280) and St. Thomas Aquinas (1225-1274), Venice had established itself as the chief center for the translation and teaching of Aristotle’s works.

In the year 1135, the Senate sent Giacomo da Venezia to Byzantium, where he was trained in post-Justinian Aristotelian orthodoxy, returning to Venice after two years to begin lectures on Aristotle and to prepare Latin versions of the Greek texts he had brought back with him. A school of

Aristotelian doctrine was set up at the Rialto market, the heart of the business and commercial activity of the city. When Venice conquered Padua at the beginning of the fifteenth century, Aristotelian hegemony was imposed on the University of Padua, which became the only one where Venetian nobility were allowed international clientele, especially from Germany.

The inveterate Aristotelianism of Venice is the starting point for a major literary attack on that city by Francesco Petrararch, son of Dante's personal secretary, who took up the responsibility of servicing Dante's humanist networks during the disastrous years around the middle of the fourteenth century. Although these were the years of the Black Death, Petrararch ("Fraunces Petrak the laureate poet" as Chaucer knew him) was the soul of a tenacious humanist rearguard action, with spirited counterattacks at every opportunity, that made the later Italian Renaissance possible.

Petrarch was a contemporary of the Ciompi revolt against oligarchical rule in Florence; he was certainly involved in Cola di Rienzo's seizure of power in Rome in May, 1347. The real story of Petrararch's literary and political achievements has yet to be told. Nonetheless, the fact that he was a determined foe of Venice and its ideology is abundantly clear.

In 1355 Venice had just passed through one of its infrequent internal crises, usually explained as the attempt of the Doge Marin Faliero to overthrow the regime and establish a Signoria, or personal dictatorship, of the type common in Italy at the time. Marin Faliero was publicly decapitated by the Council of Ten.

Petrarch might have had a hand in this operation; during this period he was a frequent guest at the court of the Da Carrara rulers of Padua, about thirty kilometers from the Venetian lagoon. Petrararch may have developed plans for injecting a dose of Platonism into the intellectual life of the Serenissima. Petrararch proposed that he be allowed to take up residence in Venice and locate his library there; the books would remain as

a bequest to the city after his death, forming the nucleus of what would have been the first public library in Europe. The Venice authorities accepted, and Petrarch, the most celebrated intellectual of his times, took up his residence on the Riva degli Schiavoni.

Soon he began to receive the visits of four Venetian Aristotelians, whom he later referred to as “my four famous friends.” These four oligarchs were Tommaso Talenti, Guido da Bagnolo, Leonardo Dandolo, and Zaccaria Contarini, the latter two of the most exalted lineage. After several discussions with Petrarch, these four began to circulate the slander that Petrarch was “a good man, but without any education.”

Petrarch shortly abandoned the library project and soon thereafter left Venice permanently. His answer to the slanderers is contained in his treatise “De Sui Ipsius et Multorum Ignorantia” (1367) (with a swipe at Aristotle in the title), his most powerful piece of invective- polemical writing.

Petrarch scored Aristotelian scholastic philosophy as “a prostitute who delights to worry about vain questions of words.” Real philosophy, with the clear purpose of advancing morality, he said, is to be found in St. Augustine. All that Aristotle is capable of doing is providing a delphic description of what the external attributes of morality might look like. To the authority of Aristotle, Petrarch counterposed the Platonism of the New Testament, saying that Christ, not Aristotle, was for him the decisive guide. His “four friends,” he asserted, were not Christian, but preferred to follow their favorite philosopher in their sophistry, blasphemy, and impiety. They mocked Christ, and were so pretentious that they could not even understand their own arguments.

Petrarch pointed out that Aristotle provided his followers with all sorts of strange and curious lore, like the number of hairs on a lion’s head or of feathers in a hawk’s tail, how elephants copulate backwards, how the phoenix arises out of his own ashes, how the only animal that can move its upper jaw is the

crocodile. But these facts are not only useless, he said, they are false. “How could Aristotle know such facts, since neither reason nor experience reveal them? Concerning the ultimate objects of philosophy, Aristotle is more ignorant than an old peasant woman.

Venetian nominalism went hand in hand with the most vicious avarice. In a play written in Venetian dialect by Carlo Goldoni in the eighteenth century, a Pantalone-type miser comes home to find wife and daughter busily engaged in needlework. The two women look up briefly and say hello. The miser flies into a rage screaming “What? You quit working to pay me compliments!”

An eminent witness of this typical Venetian vice was Erasmus of Rotterdam, who was to the years after 1500 what Petrarch had been in his own time: Leader of the Platonic humanist faction. Erasmus came to Venice in 1508, on the eve, interestingly enough, of the attempt to annihilate Venice in the War of the League of Cambrai. Erasmus came to get in touch with Aldo Manunzio, the Aldus who owned what was at that time the largest and most famous publishing house in the world.

Venice had reacted to the invention of moveable-type printing by Johannes Gutenberg of Mainz in a way that foreshadowed the reaction of the British oligarchy in this century to radio, the movies, and television. They had immediately attempted to seize control of the new medium. Dozens of Gutenberg’s apprentices from the Rhein-Main area were bought up and brought to Venice, where the production of books up to 1500 and beyond was frequently a multiple of the number of titles published in the rest of the world combined.

Aldus was the William Paley and Jack Warner of the industry. Martin Luther was one of that industry’s later creations. Aldus brought out the works of Aristotle in Greek shortly after he began operations in 1495. Plato had to wait for almost twenty years.

One of Erasmus' goals in visiting Venice was to accelerate the publication of Plato. He stayed at the home of Aldus' brother-in-law. Erasmus writes about his Venetian sojourn some time later, in the dialogue titled "Opulentia Sordida" of the *Colloquia Familiaria*. The *Urbs Opulenta* referred to is of course the wealthiest of all cities, Venice. Aldus appears as Antronius ("the caveman"), described as a multi-millionaire in today's terms.

Erasmus had been away, and is asked by a friend how he got so skinny. Has he been working as a galley slave? Erasmus replies that he has undergone something far worse: ten months of starvation in the home of Antronius. Here people freeze in the winter because there is no wood to burn. Wine was a strategic commodity in Erasmus' opinion, as indeed it was in a time when water was often very unsafe to drink. To save money on wine, Antronius took water and *faeces annorum decem miscebat* (mixed it with ten year old shit), stirring it up so it would look like the real thing. His bread was made not with flour, but with clay, and was so hard it would break even a bear's teeth. A groaning board on the holidays for a houseful of people and servants was centered around three rotten eggs. There was never meat or fish, but the usual fare was sometimes supplemented by shellfish from a colony that Antronius cultivated in his latrine. When Erasmus consulted a physician, he was told that he was endangering his life by overeating. Erasmus' friend in the dialogue concludes that at this rate, all Germans, Englishmen, Danes, and Poles are about to die. Finally, Erasmus takes his leave, to head for the nearest French restaurant.

VENETIAN INTELLIGENCE

What was the Venetian political intelligence method? The classical Venetian predicament is that of the weaker power attempting to play off two or more major empires. This was the case when the Venetian power was in its very infancy, and survival depended upon playing off the Langobard Kingdom of Italy against the Byzantines. This ploy was later replaced by

the attempt to play the Byzantines off against the Carolingian Empire in the West, an attempt that almost misfired when the army of Charlemagne under Pippin laid siege to Venice inside its lagoons. That siege, however, was not successful.

In the eleventh century, the Venetians successfully incited the Norman barons operating out of Sicily under Robert Guiscard to attack Byzantium, and then moved in to offer the desperate Byzantines protection. The price for that protection was indicated by the famous Golden Bull of 1082, a decree of the Byzantine Emperor by which Venice acquired tax customs-free access to the whole of the eastern empire, where the Greeks themselves had to pay a tax of 10 percent on their own transactions. Thus began a hatred for Venice among the Greek population which persists down to the present day.

In the sixteenth century, Venetian strategic doctrine was to play the Ottoman Turks against the Spanish and Austrian Hapsburgs, and then to correct any residual strategic imbalance by playing the Hapsburgs off in their turn against the French. Sometimes Venice attempted to play the Portuguese rival power off against the Dutch. Later this was expanded to include playing the Dutch against the English, and the English against the French.

The Venetians also goaded forces out of the East to attack Christendom. Venice was the manipulator of Saracens, Mongols, and Turks, and got along with the slave-trading factions in each of these groups about as well as a power like Venice could get along with anybody. In particular, the Venetians were more willing to see territory – excepting Venetian territory – be occupied by the Turks than any other power. Venice was thus the past master of the more exotic permutations of the stolid old British *dividi et impera*, “divide and conquer.”

But the essence of their strategic doctrine was something more abstruse, something sometimes described as the “collapse of empires” scenario. Venice parasitized the decline of much larger states, a decline that Venice itself strove to

organize, sometimes in a long and gradual descending curve, but sometimes in a quick bonanza of looting.

Venice was repeatedly confronted with the problem posed by a triumphant enemy, at the height of his power, who would be perfectly capable of crushing the Serenissima in short order. This enemy had to be manipulated into self-destruction, not in any old way, but in the precise and specific way that served the Venetian interest. Does this sound impossible? What is astounding is how often it has succeeded. In fact, it is succeeding in a very real sense in the world today.

The most spectacular example of Venetian manipulation of the dumb giants of this world has gone down in history as the Fourth Crusade. At a tournament in the Champagne in 1201, the Duke of Champagne and numerous feudal barons collectively vowed to make a fighting pilgrimage to the sepulcher of Our Lord in Jerusalem. Here they were to reinforce a French garrison hard-pressed by the Turk Saladin. For many of them, this involved penance for certain misdeeds, not the least of which was a plot against their own sovereign liege, the king.

Reaching the Holy Land required transportation, and the French knights sent Geoffrey of Villehardouin to Venice to negotiate a convoy of merchant galleys with an appropriate escort of warships. Geoffrey closed the deal with the Doge Enrico Dandolo, blind and over eighty years old. Dandolo drove a hard bargain: for the convoy with escort to Jerusalem and back, the French knights would have to fork over the sum of 85,000 silver marks, equal to 20,000 kilograms of silver, or about double the yearly income of the King of England or of France at that time.

When 10,000 French knights and infantry gathered on the Lido of Venice in the summer of 1202, it was found that the French, after pawning everything down to the family silver, still owed the Venetians 35,000 marks. The cunning Dandolo proposed that this debt could easily be canceled if the crusaders would join the Venetians in subjugating Zara, a

Christian city in Dalmatia, across the Adriatic from Venice. To this the knights readily agreed, and the feudal army forced the capitulation of Zara, which had been in revolt against Venice.

At this point Dandolo made the crusaders a “geopolitical” proposal, pointing out that the emperor of Byzantium was suspected of being in alliance with the Saracens, and that an advance to the Holy Land would be foolhardy unless this problem were first dealt with. As it happened, the Venetians were supporting a pretender to the Byzantine throne, since the current emperor was seeking to deny them their trading privileges. The pretender was the young Alexios, who promised the knights that if they helped him gain power, he would join them on the crusade with an army of 10,000 Greek soldiers.

Thus, from 1203 to 1204, Constantinople was besieged by the joint Franco-Venetian expeditionary force, which finally succeeded in breaking through the fortifications along the Golden Horn, the bay on the north side of the city.

Byzantium was sacked in an orgy of violence and destruction, from which the Venetians brought back as booty the four bronze horses which generally stand on the Basilica of St. Mark, but which are often exhibited in other cities. Count Baudoin of Flanders was placed on the throne of a new concoction titled the Latin Empire of Constantinople. The doge of Venice received a piece of the action in the form of the title Lord of Three Eighths of the Latin Empire. Venice took over three-eighths of Constantinople, a permanent Venetian colony with its own battle fleet. Lemnos and Gallipoli came into Venetian hands. Crete was annexed, and were Naxos and related islands, and the large island of Euboa, which the Venetians called Negroponte. On the Ionian side, the Venetians appropriated Modon and Koron and several islands up to and including Corfu. All Venetian trading privileges in Greece were restored.

The loot brought back from the sack of Constantinople was greater than anything Europe would see until the Spanish

treasure fleets from the New World several centuries later. Venice had acquired a colonial empire of naval bases, and was hegemonic in the eastern Mediterranean. To top it all off, the sultan of Egypt had paid a substantial bribe to Dandolo to keep the Crusaders out of Palestine in the first place.

For the human race, the Fourth Crusade was an unmitigated tragedy. The hypertrophy of Venetian power in the Mediterranean was one of the decisive factors ensuring the later defeat of Emperor Federigo II of Hohenstaufen, King of Sicily. The Venetian puppet "Latin Empire" was overthrown by the Paleologues in 1261, but by that time Federigo was gone. By 1266-68, Federigo's two sons and their Ghibelline supporters were defeated by Charles of Anjou, and the last representative of the Hohenstaufen dynasty was beheaded in the public square of Naples. The triumph of the Black Guelphs had become irreversible.

A further contributing factor in this tragedy was doubtless the Mongol hordes. At about the time the Venetians were sacking Constantinople, Ghengis Khan ruled over an empire that extended from Korea all the way to Iran, and which was rapidly advancing to the West. Batu, a nephew of Ghengis, defeated the Bulgarians in 1236, captured Kiev in the Ukraine in 1240, and swept into Poland. In Silesia in 1241 the German and Polish feudal army, including the Teutonic Knights, was annihilated. Later in the same year the Mongols defeated the Hungarians. The Mongols did not, for reasons that are not clear, advance further westward, but the Mongol Golden Horde that imposed its hegemony over Russia was the beginning of Russia's economic and cultural backwardness. For some loosening of the Mongol yoke, the Russians would have to fight the titanic battle of Kulokovo Field on the Don in 1380.

In these Mongol victories, there was something more than mere numerical superiority at work. as one historian sums up the case:

The Mongols did not sweep in wildly and suddenly, like reckless barbarians. No indeed, they advanced according to careful plan. At every stage, the Mongol generals informed themselves ahead of time about the state of European courts, and learned what feuds and disorders would be advantageous to their conquests. This valuable knowledge they obtained from Venetian merchants, men like Marco Polo's father. It was thus not without reason that Polo himself was made welcome at the court of Kublai, and became for a time administrator of the Great Khan.

So the great Marco Polo, and the Venetian family from which he came, was responsible for directing the destruction of Ghengis Khan against Europe. The omnipresent Venetian intelligence was also a factor in the Mongol destruction of the Arab cultural center of Baghdad in 1258.

Friedrich Schiller and William Shakespeare both analyze the manipulative methods employed by the Venetian secret intelligence establishment; both considered Venetian intelligence one of their most formidable enemies. Much of Schiller's writing is dedicated in various ways to fighting the Venice- Genoa- Geneva combination that had held the financial reins of King Philip II of Spain.

Schiller's direct treatment of Venice is a fragment of a novel titled *Der Geisterseher* ("The Ghost Seer"). Its central character is a Sicilian charlatan, expert at bringing the spirits of the departed back into the world for the thrill-seeking nobility at seances. This Sicilian charlatan is a figure for a whole class of Venetian intelligence operatives, like Count Cagliostro, the mountebank who claimed to be the reincarnation of the leading Mason of ancient Egypt. Another of this breed was Emanuel Swedenborg. After Schiller's time, this category swelled considerably with theosophists like Madame Blavatsky, Annie Besant, Henry Steel Olcott, and with that archapparitionist Rudolph Steiner, founder of the Anthroposophy movement and the Waldorf schools.

In Schiller's tale, a young German prince in Venice for the grand tour is subjected to a series of manipulations by a sinister, masked Armenian, who informs him, before the fact, of the death of a close relative hundreds of miles away. At a gambling den, a young Venetian patrician picks a quarrel with the prince, who fears for his life until he is ushered into one of the chambers of the Council of Ten, where the offending patrician is strangled before his eyes. He comes into contact with the Sicilian mountebank, and then spends weeks attempting to ascertain the identity of a mysterious beauty he has seen at church.

He begins to frequent a semi-secret free-thinking club, called the Bucentoro after the golden ship used by the doge on occasions of state. At least one cardinal is also a member of the Bucentoro. He takes to gambling, loses heavily, and contracts immense debts. In the meantime, rumors are spread at his Protestant court that he has become a Catholic, which leads to his repudiation by his entire family. At the end of the fragment, his life has been ruined, and his death is imminent.

Shakespeare's "Othello, The Moor of Venice" is a more finished analysis of the same technique. It was written and performed shortly after 1603, when the Venetians and Genoese had acquired vast powers in England through the accession of their puppet James I to the throne.

Othello is a Moor, hired out to Venice as a mercenary, and at the apex of his power, having just won a victory over the Turkish fleet attacking Cyprus. He enjoys the full confidence of the Senate, and has just married Desdemona, the daughter of a patrician. Othello, the "erring barbarian," is however something of a dumb giant: his proficiency in the arts of war is unmatched, but his emotional makeup tends decidedly toward the naive and infantile. He has no real insight into affairs of state, or into psychology. Above all, he is superstitious and has a propensity for jealousy.

All of these weaknesses are systematically exploited by "honest Iago," a member of Othello's staff who is determined

to destroy him. Iago is the figure of the Venetian intelligence officer, an expert in what he calls “double knavery” – the art of manipulation. He sets out to destroy Othello using an accurate psychological profile of the Moor, and exploiting above all Othello’s naive willingness to trust his “honest Iago.” Iago’s modus operandi is to:

Make the Moor thank me, love me, and reward me,
For making him egregiously an ass
And practicing upon his peace and quit
Even to madness.

Iago uses his throwaway agent, the dupe Roderigo, for financing and services. He sets up scenes where he cons one participant with one story, briefs another participant with a different story, brings them together in a controlled environment, and exploits the resulting fireworks for his overall strategy. He sets up a fight between Roderigo and the drunken Cassio that leads to the wounding of Montano by Cassio, who is ousted as chief lieutenant by Othello. After this, he manipulates Desdemona’s naive desire to help Cassio regain his post into prima facie evidence that Desdemona is an adulteress. Iago is then able to goad Othello all the way to killing Desdemona and, finally, himself.

At the center of the play are epistemological questions of truth and proof. In Act 3, Iago drives Othello wild with innuendoes about Desdemona’s alleged adultery, and makes him commit to the murder of Cassio, all without the slightest shred of proof. What Othello then regards as definitive proof of adultery, sufficient to motivate the murder of Desdemona, is a handkerchief which Iago obtains and plants on Cassio. This handkerchief is an object of deep emotional and superstitious importance for Othello, as it had been given by his father to his mother. It had been his first love token for Desdemona. When he sees it in the hands of Cassio, he is ready to kill.

Iago is well aware of Othello’s epistemological weakness. When he first obtains the handkerchief, he gloats:

I will in Cassio's lodging lose this napkin,
And let him find it. Trifles light as air
Are to the jealous confirmations strong
As proofs of holy writ; this may do something.

Shortly thereafter, Othello demands certainty that Desdemona is betraying him. What would be definitive proof, Iago asks?

Would you, the supervisor, grossly gape upon –
Behold her tupp'd?

This kind of certainty, he says, is impossible to obtain, but he offers an inductive- deductive substitute:

But yet, I say,
If imputation and strong circumstances,
Which lead directly to the door of truth,
Will give you satisfaction, you might have't.

In the final scene, we can agree with Iago's wife Emilia that Othello is a gull and a dolt, a "murderous coxcomb ... as ignorant as dirt." But the lesson is that not only Othello, but all those who love not wisely but too well, who, "being wrought" and "perplexed in the extreme," are potential victims of Venetian intelligence.

THE VENETIAN DESTRUCTION OF THE RENAISSANCE

Since the Venetian oligarchy relied for its survival on the secret weapon of political intelligence manipulation, its primary strategic targets were first and foremost dictated by epistemological rather than military criteria. Fleets and armies, even in the hands of a powerful and aggressive enemy state, could well redound to Venetian advantage. The real danger was a hostile power that developed epistemological defenses against manipulation and deceit. In the face of such a threat Venice did – and does – kill.

The Italian Renaissance of the fifteenth and sixteenth centuries, perhaps the greatest outpouring of human creativity in history, represented such a threat to the Serene Republic, and in a more concentrated form than it had ever faced before. The threat arose from the epistemological warfare and alliance system of the great Cosimo de' Medici of Florence and his successors. Venice mobilized every resource at its disposal to destroy the Renaissance. After decades of sabotage, going so far as to arrange the ravaging of Italy by foreign armies, Venice succeeded.

The potential political and epistemological power of the Italian Renaissance are best identified in the ecumenical council of the Church convened in Florence in the year 1438. The council, first convened in Ferrara, was moved to Florence at the urging of Cosimo de' Medici, who held power from 1434 to 1464. Cosimo was the major financial and political sponsor of the proceedings.

Cosimo was a self-declared enemy of Venice. On one occasion he wrote, "Association with the Venetians brings two things which have always been rejected by men of wisdom: certain perdition and disgrace."

The council had to deal with the ongoing crisis in the western church, which had been exacerbated by the struggle between the Council of Basel and Pope Eugene IV, who had been driven out of Rome by a revolt. In the East, the Ottoman Turks were beginning to recover from the crushing defeat that the Turkish Emperor Bajazet had suffered in 1402 at the battle of Ankara at the hand of Tamerlane the Great. The first, unsuccessful, Turkish siege of Constantinople had already been mounted in 1422.

The hope held out by the Council of Florence was to implement Nicolas of Cusa's program of the *Concordantia Catholica* – a community of principle among humanist sovereign states for cultural and economic development, against Venetians, Turks, and all enemies of natural law. To Florence came the Emperor of Byzantium, John VIII

Paleologue, accompanied by his advisor Gemisthos Plethon and Plethon's student, Archbishop Bessarion of Nicea. The Latin delegation was titularly headed by Pope Eugene IV, heavily dependent upon the support of Cosimo de' Medici at that time. This delegation was dominated in outlook by men like Nicolas of Cusa, Leon Battista Alberti, Leonardo Bruni, Cardinal Capranica, and Aeneas Piccolomini of Siena, later Pope Pius II. The Greek and Latin delegations were each profoundly vitiated by powerful Aristotelian factions, but this was still one of the most impressive assemblies in history.

The culmination of the council was an impassioned oration by Plethon on the antithesis between Plato and Aristotle, a speech which went far beyond anything ever heard in the West. Marsilio Ficino, himself a participant at the council, tells the story of how Cosimo de' Medici, while listening to Plethon, made up his mind to create the Platonic Academy in Florence.

The most immediate question to be addressed was the reunification of the Roman and Greek churches, abrogating the mutual excommunications issued by the pope and the patriarch of Constantinople in 1054. The contending theologians debated the question of the "filioque" in the Latin credo, attempting to resolve the question of whether the Holy Spirit proceeds only from the Father, as the Greeks argued, or from the Son as well, according to the Roman view. The Greeks eventually agreed to recognize the correctness of the Latin position, although they declined to modify their own credo accordingly. The Paleologue emperor intervened repeatedly in these discussions, stressing that there were no real differences in doctrine, and that anyone who let nonexistent divergences stand in the way of common action against the Turks was a worse traitor than Judas. In the end a purely formal reunification of the two churches was attained, but it remained a dead letter.

Even so, Cosimo and his cothinkers came close several times to welding an alliance capable of dominating the world, and the first to pay the price of their success would have been the

Venetians. Medici Florence was at the center of a network of trade and finance that was beginning to rival Venice, with the crucial difference that the Florentines were the producers, thanks to Cosimo's dirigism, of the textile products they offered for sale. The Duchy of Milan would shortly come under the domination of the condottiero (mercenary commander) Francesco Sforza, installed in power with the help of the Medici, and an enemy of Venice. In 1461 the humanist Louis XI would take the throne of France. This new king was determined to apply the concepts of statecraft developed in Italy, and considered the Venetians "insolent merchants." In 1460, the humanist Aeneas Silvius Piccolomini would be elected Pope Pius II; in the meantime he was in a position to influence Frederick III of Hapsburg, the Holy Roman Emperor.

The Venetian reaction to this potential for the implementation of an ecumenical Grand Design on the platform of the Italian Renaissance humanists was, predictably, to bring on the Turks once again. During all these years the Turks possessed a combined warehouse- residence- safehouse in Venice, the Fondaco dei Turchi, which facilitated dealings between the doge and the sultan. Spurred on by Venetian financing and Venetian- procured artillery, the Sultan Mohammed the Conqueror laid siege to Constantinople and captured it in 1453. The Turks were aided by the Greek patriarch, who had pronounced the defense of the Paleologue dynasty a heretical cause. Finally, it was the Genoese troops who opened the gates of the city to the forces of the sultan. Hardly a coincidence was the burning of the library of Constantinople with its matchless collection of Ionian and Platonic codices, most unavailable anywhere else since the library of Alexandria had been destroyed some fifteen centuries earlier. In their own sack of Constantinople in 1204, the Venetians had declined to appropriate these manuscripts.

The destruction of Byzantium by the Turks gave the Venetians a slogan with which to organize their war against the Renaissance. Since the Roman Empire had finally ended, it was left to the Venetians to arrogate to themselves the task of

building a new Roman Empire. The foundation of a new Roman Empire became, in Venice, from the middle of the fifteenth century on, the leading obsession of the oligarchs.

“The Venetians are called new Romans,” confided the patrician Bernardo Bembo to his diary. Francesco Sforza of Milan wrote that the Venetians were:

“obstinate and hardened, always keeping their mouths open to be able to bite off power and usurp the state of all their neighbors to fulfill the appetite of their souls to conquer Italy and then beyond, as did the Romans, thinking to compare themselves to the Romans when their power was at its apex.”

Machiavelli wrote that the Venetians had “fixed in their souls the intention of creating a monarchy on the Roman model.” This is corroborated by a dispatch of the ambassador of Louis XII of France at the court of the Emperor Maximilian I some years later, which described the Venetians as:

“traders in human blood, traitors to the Christian faith who have tacitly divided up the world with the Turks, and who are already planning to throw bridgeheads across the Danube, the Rhine, the Seine, and Tagus, and the Ebro, attempting to reduce Europe to a province and to keep it subjugated to their armies.”

These megalomaniac plans of the Venetians were no secret. In 1423, the Doge Tommaso Mocenigo had urged upon his fellow oligarchs a policy of expansionism which would make them the overlords “of all the gold and of Christendom.”

The most penetrating indictments of the Venetians during this period were issued by Pope Pius II Piccolomino, who tried in vain to force Venice into joining a crusade against the Turks. A Venetian saying of this period was *Prima son Vinizian, poi son Cristian*. (I am a Venetian first, then a Christian.) In his *Commentaries*, Pius II excoriates the Venetians for their duplicitous treachery, and establishes the fact that they are a

pagan, totalitarian state. The Venetians, he says, have acted in their diplomacy:

“with the good faith characteristics of barbarians, or after the manner of traders whose nature it is to weigh everything by utility, paying no attention to honor. But what do fish care about law? As among the brute beasts aquatic creatures have the least intelligence, so among human beings the Venetians are the least just and the least capable of humanity, and naturally so, for they live on the sea and pass their lives in the water; they use ships instead of horses; they are not so much companions of men as of fish and comrades of marine monsters. They please only themselves, and while they talk they listen to and admire themselves.... They are hypocrites. They wish to appear as Christians before the world, but in reality they never think of God and, except for the state, which they regard as a deity, they hold nothing sacred, nothing holy. To a Venetian, that is just which is for the good of the state; that is pious which increases the empire.... What the senate approves is holy even though it is opposed to the gospel.... They are allowed to do anything that will bring them to supreme power. All law and right may be violated for the sake of power.”

During many of these years Venetians were in a tacit alliance with the Turks. When, for example, a revolt against Venetian rule in Albania was started, threatening the Venetian naval base at Durazzo, the Venetians made a deal with the Turks to crush the revolt. On one occasion Pius II received the Venetian ambassador to the Roman court and condemned Venetian policy with these words:

“Your cause is one with thieves and robbers.... No power was ever greater than the Roman empire and yet God overthrew it because it was impious, and He put in its place the priesthood because it respected divine law.... You think [your] republic will last forever. It will not last long. Your population so wickedly gathered together will soon be scattered abroad. The offscourings of fishermen will be exterminated. A mad state cannot long stand.”

In 1464 Pius II, despite a serious illness, traveled from Rome to Ancona to personally lead a crusade against the Turks. He wished to force the hand of the Venetians, who had promised him a battle fleet. He died shortly after the Venetian warships arrived, and Venice thereupon pulled out of any serious fighting against the Turks. But his attack on “the mad state” was on target, then and now.

During the first half of the fifteenth century, much Venetian energy was devoted to a rapid expansion up the Po Valley toward Milan. They seized Padua, Vicenza, Verona, Brescia, and Bergamo, reaching the Adda River, just a few miles from Milan. With Milan under Venetian control, the “new Romans” could bid fair to dominate northern Italy and then the entire peninsula.

Cosimo de’ Medici, as we have seen, secured a Florence-Milan alliance by supporting the claims of Francesco Sforza, fighting a war against Venice to do it. Basing himself on this Florence-Milan axis, Cosimo then proceeded to create an uneasy peace in Italy that was to last forty years. This was the Italian League, formed at the Peace of Lodi in 1453, which united the leading powers of Italy, the pope, Naples, Milan, Florence, and Venice, ostensibly in an alliance against the Turks, who had for a time held a toe-hold in Apulia. In reality, the Italian League was a Florence- Milan- Naples combination designed to check Venetian expansionism. In this it proved effective, giving the Renaissance almost half a century of time to develop under the *longa pax* of the Medici.

During these years, stymied in Italy, the Venetians concentrated on overseas expansion, including the conquest of Cyprus. But on the death of Cosimo’s successor, Lorenzo the Magnificent, they began their systematic campaign to destroy the civilization of the high renaissance. Their basic premise was that, given their own inability to devastate the centers of Renaissance culture and economic development, they must concentrate on duping the overwhelming military forces of

European states like France, Spain, and the other Hapsburg dominions into accomplishing this task for them.

The most competent contemporary observer of these matters was Niccolo Machiavelli, active somewhat later in the post-Medici Florentine diplomatic service, and a factional ally of Cesare Borgia, Duke of Valentino. Machiavelli noted that the two most dangerous forces in Italy around the turn of the century were the Venetians and the pope. His own hatred was directed especially against Venice, firstly because of the stated Venetian intention to subjugate Italy in a new Roman Empire. Secondly, Venice more than any other state relied on armies of mercenaries, and thus embodied precisely that practice which Machiavelli knew had to be extirpated, in favor of citizen-soldiers, if Italy was to be saved from humiliating subjugation to the likes of the Hapsburgs.

Machiavelli pointed out that the disintegration of Italy began when the Venetians succeeded in turning Lodovico il Moro, successor of Francesco as Duke of Milan, making him their agent of influence. Lodovico was responsible for the first major invasion of Italy in many years when he agreed to support the claims of Charles VIII of France to the Kingdom of Naples. This was the French king whom his father, the great Louis XI, considered a hopeless imbecile. In 1494 the French army crossed the Alps, accompanied by a Genoese advisor we will meet again later: Giuliano della Rovere.

This was enough to bring about the fall of the Medici regime in Florence, to the advantage of the Pazzi, Albizi, and related oligarchs of that city. These oligarchs immediately sought to crush the Florentine Renaissance using the regime of the demented Dominican monk Girolamo Savonarola, who set up a theocracy a la Khomeini. Savonarola proudly trumpeted that his rule was based on sound Venetian principles; his family was closely related to the Padua Aristotelian community. As for Charles VIII, he went on to establish a tenuous hold on Naples.

Several years later, in 1498, the Venetians repeated this maneuver, with the variation that this time it was they who blatantly invited the French to cross the Alps. This time the pretext was the French claim to the Milanese dukedom, and the dupe was a new French king, Louis XII. The French army knocked out Milan in 1500, a fatal blow to the Renaissance cultural ferment associated there with Leonardo da Vinci. Shortly thereafter, Louis XII decided to compensate the Hapsburgs with Naples. Naples accordingly became the first beachhead of what would shortly become a totally destructive Hapsburg hegemony in Italy.

VENICE AND GENOA COMBINE

For Venice, so far so good: Florence, Naples, and Milan had been ruined. But ironically, the same dumb Valois and Hapsburg giants which had taken out three dangerous rivals were now to turn like Frankenstein's monsters on the wily new Romans. Venetian manipulations were about to boomerang in the form of an alliance of all of Europe against Venice.

This was the famous crisis of the War of the League of Cambrai, which was assembled in 1508-1509. The opposing coalition was made up of the pope (by then the Genoese Giuliano della Rovere, as Julius II), the Holy Roman Emperor Maximilian I, France, Spain, Savoy, Mantua, and Ferrara. The announced purpose of this alliance was to expunge Venice from the face of the earth.

It nearly worked. At Agnadello, near the Adda River, the Venetian mercenary army was crushed by an army composed predominantly of Frenchmen. The Venetians were driven all the way down the Po Valley to Padua, and they soon lost that as well. Machiavelli exulted that on the day of Agnadello, the Venetians lost everything that they had conquered in more than 800 years. Machiavelli was himself engaged in operations against Venice, bringing a grant of Florentine cash to the aid of the Franco-Imperial forces holding Verona.

With nothing left but the lagoons, the Venetian position was desperate. The doge sent a message to the pope asking for mercy, and announcing that Venice would vacate territory taken in the past from the Papal States.

Inside Venice, Agnadello brought on an orgy of hysterical self-flagellation among the terrified patricians. The banker Girolamo Priuli wrote in his diary that Agnadello had been a punishment for the sins of the Venetian nobility, among which he numbered arrogance, violation of promises, lechery in nunneries, sodomy, effeminate dress, and luxurious and lascivious entertainments. Antonio Contarini, newly appointed patriarch of Venice, gave a speech to the Senate in which he characterized the Serenissima as a thoroughly amoral city. The defeat was a punishment for the city's sins, he said. Nunneries were catering to the sexual needs of the rich and powerful. Homosexuality was so widespread that female prostitutes had complained to him that they had earned so little during their youth that they had to keep working far into their old age.

But more significantly, the shock of Agnadello set into motion a strategic review in the Venetian intelligence community which led to very far-reaching conclusions, some of which were not obvious before several decades had gone by.

The first Venetian ploy was to attempt to dismember the Cambrai coalition. They started with Pope Julius II. This pontiff was, as already noted, Genoese. Genoa and Venice had engaged in a series of highly destructive wars up till about the end of the fourteenth century, but after that, Genoa gravitated toward the status of junior partner and close associate of the Venetians. The Venetians had bested the Genoese by virtue of superior connections in the East, but otherwise their was a broad area of agreement.

The symbol of Genoa was St. George the dragon-slayer, in reality no saint at all but a thinly disguised version of Perseus saving Andromeda by slaying the sea monster, a legend that is centered on the coast of Lebanon. The "George" is said to

come from the Gorgon Medusa, whose head Perseus was carrying.

Perseus is in turn nothing but a westernized variant of Marduk, the Syrian Apollo, a deity associated with the most evil forces of ancient Assyria and Babylon. The Venetians had their own Marduk cult, although subordinated to St. Mark, on the island of San Giorgio Maggiore, home of a Dominican monastery and today of the Cini Foundation, one of the highest level think tanks in the world. The modern British preference of Gorgons is too well known to need comment.

What probably accounted more directly for Julius II's decision to reverse his alliances was a deal mediated with the Venetians by Agostino Chigi, the Siena Black Guelph banker from whose financial empire the infamous Siena Group of today derives. He proposed that the Venetians stop buying alum, needed in textile and glass manufacture, from the Turks, but contract for a large shipment at higher prices from the alum mines at Tolfa in the Papal States – mines for which he, Chigi, was acting as agent. To sweeten the pot, Chigi offered the Venetians tens of thousands of ducats in much-needed loans.

The Venetians, fearing a rapid French offensive, accepted. Their own state finances were in total shambles. Only the Chigi loan allowed them to hire enough Swiss mercenaries to hold out against the French and the Imperial Landsknechte.

To provide a plausible cover for his move, Julius II suddenly discovered that the real issue was not Venice after all, but the need to expel the barbarians (primarily the French) from Italy. Julius stipulated an alliance with Venice. He then set up the slogan of *Fuori Barbari!* (Kick the Barbarians out!) which is still recorded by credulous writers of Italian school books as the beginning of the struggle to unify Italy. Even the Venetian mercenaries, mostly Swiss, began using the battle cry of “Italy and Freedom!”

Thus the post-Agnadello crisis was overcome. Some years later the Venetians tried the same tactic in reverse, this time

with more lasting success. By 1525 the prevalent barbarians in Italy were the forces of Emperor Charles V, who had defeated the French at Pavia, capturing King Francis I. The French lost their hold on Naples and Milan. At this point Doge Andrea Gritti, whose portrait by Tiziano speaks volumes about his personality, decided to agitate once again the banner of Italian freedom. This took the form of the Holy League of Cognac “for the restoration of Italian liberty,” uniting France, Venice, Milan, Florence, and the Papal States under Pope Clement VIII Medici. After having set up this alliance, designed to play the French against Charles V once again to destroy Medici-controlled Rome, the last intact Renaissance center, the Venetians retired into defensive positions to await the outcome.

Venetian capacities to manipulate Charles V were formidable indeed. The emperor’s bankers and intelligencers were the Fuggers of Augsburg, a banking house and a city that must be regarded as Venetian satellites, within a context of very heavy Venetian control of the cities of the Danube valley. Virtually every young male member of the Fugger family, and of their colleagues the Welsers as well, was sent to Venice for a period of apprenticeship at the Fondaco dei Tedeschi. This was the case with Jacob Fugger the Rich. Venice was the pivot for Fugger metals trading, especially toward the East.

Thus, the Venetians stayed in their phony war posture against Charles V, while the imperial army of Lutheran Lanzis under Georg Frundsberg devastated Italy. The sack of Rome in 1527 was the direct outcome of this combined Venetian diplomacy and manipulation. To make Charles V’s triumph complete, the Genoese Admiral Andrea Doria, commanding the French fleet, defected to the imperial side. A Doria coup in Genoa then established a permanent *de facto* alliance with Venice.

In 1530, Charles V was crowned as Holy Roman Emperor and King of Italy in a ceremony at Bologna. Garrisons of imperial troops were shortly stationed in every major city. Thanks to the tenacious policy of the Venetians, the main centers of the Renaissance had been subverted or destroyed. Venice was the

only major Italian state which had retained real sovereignty. With the end of the Renaissance, Venice could feel free to start a delphic Renaissance among the throngs of intellectuals seeking asylum in the lagoons.

THE CREATION OF THE JESUITS

The “long autumn of the Italian Renaissance in Venice” during the rest of the sixteenth century was only one deployment among several. Another was the promotion of the Protestant Reformation. The more immediate controllers of Martin Luther have yet to be identified, but this is something of a secondary matter. Luther’s agitation in Wittenberg was merely one more example of protests against the papacy and the Curia that had been chronic and endemic for decades. What gave Luther and the rest of the Protestant reformers real clout was a publicity and diffusion of their ideas that owed much to the Venetian publishing establishment. The Venetian presses quickly turned out 40,000 copies of the writings of Luther, Calvin, Melancthon, and the heresiarch Juan Valdes, especially popular in Italy.

Pope Leo X publicly denounced the University of Padua as the hotbed of inspiration of the German disease of Lutheranism. Clearly, Venetian interest was well-served by a schismatic movement that would embroil Germany, France, and the rest of Europe in a series of easily profiled conflicts. In addition, a conflict between reformers and counter- reformers, all owing allegiance to Aristotle, would severely undercut the influence of Erasmus and others like him.

Venetian influence on both Reformation and Counter-Reformation can be seen most clearly in the remarkable career of Gasparo Contarini, who did not let the fact that he was a Protestant in theology, well before Luther, prevent him from founding the Society of Jesus.

Contarini was the scion of one of Venice’s most prestigious LONGHI families. The Contarinis had produced seven doges,

and Gasparo had his sights set on being the eighth, before he was tapped to serve Venice as a member of the College of Cardinals. He served the Serene Republic as ambassador to the court of Charles V, and as ambassador to the Vatican, where he took a role in setting up the Medici Pope Clement VII for the 1527 sack of Rome. Toward the end of his life, Contarini was sent as papal legate to the Imperial Diet at Regensburg, where he represented the Roman point of view in debates with schismatics like Melancthon. There, he had a hand in destroying any compromise between the Lutherans and the Emperor Charles, which would have helped to end the bloodshed and dissension of the Reformation years.

What does this sublime Venetian patrician have to do with the founding of the Jesuit order by that itinerant and deranged mystic, Ignatius of Loyola? Ignatius was the creature of Venice, and of Contarini in particular.

In 1521, Ignatius was wounded while fighting the French in one of the wars of Charles V. During his convalescence, he underwent his much-touted mystical crisis, after which he took up the life of a hobo. Making his way around Europe seeking funding for a pilgrimage to the holy land, Ignatius found his way to Venice, where he camped out in St. Mark's Square and lived by begging.

One evening the Venetian oligarch Marcantonio Trevisan was sleeping in his golden palace, and had a vision. An angel came to him asking, "Why are you sleeping so soundly in your warm bed, while in the square there is a holy man, a poor pilgrim who needs your help?" Trevisan rushed downstairs to find Ignatius, who became his house guest, fleas and all.

After that, Ignatius was given an audience with the doge, Andrea Gritti, who offered him passage to Cyprus on a Venetian warship as first leg of his pilgrimage to Jerusalem. Ignatius continued his travels, but soon returned to Venice to develop relationships with other members of the oligarchy. These included Gasparo Contarini's nephew Pietro, who

became a recipient of Ignatius' patented brainwashing treatment, the *Exercitationes Spirituales*.

Then Ignatius made his way to Rome. Here he became the protégé of Gasparo Contarini, who had been appointed to the College of Cardinals by Pope Paul III Farnese. The cardinal took the *Exercitationes Spirituales*, and appointed Ignatius his personal confessor and spiritual advisor. By 1540, Contarini had personally interceded with the pope against Ignatius' enemies within the church hierarchy to ensure the founding of the Society of Jesus as a new Church order. In June 1539, Contarini personally traveled to the pope's summer residence at Tivoli, and prevailed on the pontiff to let him read aloud the statutes of the new order composed by Ignatius. The pope must have been favorably impressed by something. His approving comment *Hic est digitus Dei*, ("Here is the finger of God"), has become a feature of the turgid Jesuit homiletics.

BIRTH OF THE ENLIGHTENMENT

An ironic postscript to this story is that later the Venetian oligarchy decided that it simply would not do to be too closely identified with the benighted excesses of the Spanish and the papacy they so thoroughly dominated. In the years around 1570, accordingly, Venice became the site of the first example in Europe of what the French later termed "salons" for socializing and literary discussion: the *Ridotto Morosini*, sponsored by the ancient family of the same name. Here the seeds were sown that would later produce free-thinking, *l'esprit libertin* and the *Philosophes* – in a word, the Enlightenment. The *Ridotto Morosini* salon was in favor of tolerance and science, against everything doctrinaire and narrow. They sheltered Galileo against the Inquisition. Out of the *Morosini* salon came one of the rare public factions in Venetian political history, the so-called *Giovani*.

The *Giovani*, in contrast to their rivals, the *Vecchi*, were in favor of profound innovations in Venetian foreign policy. They wished above all to cement alliances with the countries to

whom they felt the future belonged: France, England, and the Netherlands. The Vecchi, they said, were paralyzed by too much fear of Spanish power, and not ready enough to tangle with the people.

The Giovani were able to implement their program in 1606, when the Pope (now Paul V, Camillo Borghese) strenuously objected to the arrest by Venice of several ecclesiastics in its territory. The Borghese pope placed Venice under the interdict, and proceeded to excommunicate government officials. The main supporter of Venice internationally was James I, the Stuart ruler of England.

At the same time, the powerful Venetian propaganda apparatus swung into action, under the leadership of a Servite monk named Paolo Sarpi, whose lack of noble birth kept him from public office. Sarpi was the Venetian contact man for Sir Francis Bacon.

Sarpi had been in Rome, where he had been associated with Nicholas Bobadilla, one of St. Ignatius' original hard core. He had been a friend of Bellarmino, later the Jesuit-general, and his direct adversary during the Interdict affair. He was close to Galileo, who called him "my father." Sarpi had lent a hand in the construction of Galileo's telescope. Sarpi was lavish in his praise of Gilbert's treatise on magnetism. He was also the author of an *Arte di Ben Pensare*, which is curiously similar to the writings of John Locke. Sarpi admitted in private to being "a Protestant."

He engaged in a long pamphlet war with Bellarmino, and topped this off with a muck-raking *History of the Council of Trent*, which needless to say whitewashed the role of Venetian intelligence in the Counter-Reformation. The noise created around the whole affair was so great that some people forgot that it had after all been the Venetians, specifically Zuane Mocenigo, who had consigned Giordano Bruno – also of Ridotto Morosini – into the hands of the Inquisition just a few years before.

METASTASIS

The policies of the *Giovani*, propagandized by Sarpi and Doge Leonardo Dona' during the struggle around the Interdict, corresponded to a metastasis of Venice's power and influence through the world. The Venetians and their Genoese Doria-faction associates were busily shifting their family fortunes into more profitable locations, not tied to the fate of what was rapidly becoming a third-rate naval power.

The Venice-Genoa partnership is in evidence first of all in the banking side of the Spanish looting of the New World. Venice got control of the silver coming from the Americas, shifting to a silver standard from the previous gold standard in the middle of the sixteenth century. This silver was used to pay for the spices and other products from the East.

Venice was extremely liquid at this time, with about 14 million ducats in coins in reserve around 1600. At about the same time, incredibly, the Venetian regime had completed the process of paying off its entire public debt, leaving the state with no outstanding obligations of any type. This overall highly liquid situation is a sure sign that flights of capital are underway, in the direction of the countries singled out by the *Giovani* as future partners or victims: France, England, and the Netherlands.

The Genoese around the St. George's Bank received virtually the entire world's circulating gold stocks. The two cities teamed up starting around 1579 at the Piacenza Fair, a prototype of a clearing house for European banks, which soon had a turnover of 20 million ducats a year. This fair was a precursor of the post-Versailles Bank for International Settlements.

In 1603, Venice and Genoa assumed direction of the finances of Stuart England, and imparted their characteristic method to the British East India Company. It is also this tandem that was present at the creation of the great Amsterdam Bank, the

financial hinge of the seventeenth century, and of the Dutch East India Company. Venice and Genoa were also the midwives for the great financial power growing up in Geneva, which specialized in controlling the French public debt and in fostering the delphic spirits of the Enlightenment.



The Venetians, in cooperation with the restored – that is, degenerated – Medici interests, began a major move into maritime and other types of insurance. These ventures live on today in the biggest business enterprise associated with

Venice, the Assicurazioni Generali Venezia, one of the biggest if not the biggest insurance and real estate holdings in the world.

On May 12, 1797, the Gran Consiglio obeyed Napoleon's ultimatum and voted itself out of existence. Four thousand French infantrymen paraded on St. Mark's Square, where foreign troops had never before in history been seen. The golden Bucentoro (Satanic Baal) was burned and the gold carted off. The Venetian "Republic" was finished, but it continued most emphatically to exist in less visible but highly effective forms.

One particular of the last years of Venice is of special interest to us: During the American Revolution about 3000 Venetian naval personnel, corresponding to about one-third of the total available strength, were serving with the British Royal Navy.

Commenting on the liquidation of Venice, the great Neapolitan Neoplatonic Giuseppe Cuoco wrote:

"I don't know what will happen to Italy, but the fulfillment of the Florentine secretary's prophecy in the destruction of the old, imbecilic Venetian oligarchy will be a great boon for Italy always."

The reference, of course, is to Machiavelli.

On the other side, William Wordsworth lamented the demise of "a maiden city," the "eldest child of liberty."

POST MORTEM

Unfortunately, all the obituaries were premature: Venice has continued to be very much alive. During the nineteenth century and up to our own time it has been the most important single incubator for fascist movements. With its military and financial power largely emigrated elsewhere,

Venice's importance for political culture is now greater than ever.

Examples of this are inexhaustible. Richard Wagner wrote part of *Tristan und Isolde* while living in the Palazzo Giustinian on the Grand Canal. One story has it that the leitmotif of the Liebestod was inspired by the mournful call of a gondolier. At the end of his life Wagner moved to Palazzo Vendramin Callergi, where he died. This building, presently a gambling casino, was also the home of Count Coudenhove-Kalergi, the founder of the Pan-European Union. Friedrich Nietzsche loved Venice, returned there incessantly, and dedicated certain poems to the city which today can still be used in lieu of a powerful emetic. Venice was an inspiration for Lord Byron, for Thomas Mann, and so on.

Other examples abound of how the Venetian oligarchy's cultural and political influence has reached down into the modern era:

* When British East India Company retainer Thomas Malthus published his *Essay on Population* he was plagiarizing from the Venetian Giammaria Ortes, who produced, around 1750, a fully developed version of the argument that geometric population growth outstrips the much slower arithmetic progress of food production.

* John Ruskin, the leading ideologue of the British Dark Ages faction, began his career with a raving treatise on architecture, *The Stones of Venice* (1851). This volume popularized the notion that a "Venetian Gothic" style had been developed in the better times of the city's history (which for Ruskin ended in 1418) and it was used systematically to discredit the Golden Renaissance.

* A turn-of-the-century new Roman Empire faction led by Venetian Count Volpi di Misurata, who was known as the doge of his era, sponsored the fascist Mussolini supporter Gabriele D'Annunzio to drum up enthusiasm for a new crusade into the Balkans and the East. Volpi became finance minister in

Mussolini's cabinet, along with a very large number of other Venetians. D'Annunzio incited the Italians to take back Trieste, the rest of Italia Irredenta, and the Dardanelles, bringing on to center stage the so-called Parvus Plan for dismemberment of the Ottoman and Russian empires, which is generally recognized as the detonator of World War I. It is possible that the turn-of-the-century super spook Alexander Parvus was ultimately employed by Venice.

* The Societe Europeenne de Culture, a think tank created in 1950 through the efforts of Venetian intelligence operative Umberto Campagnolo, has for the past three decades pulled intellectuals from both East and West into organizing for an "international culture," based on rejecting the existence of sovereign nations. The SEC counted among its members the cream of the postwar intelligencia: Adam Schaff of Poland, Bertolt Brecht of East Germany, Georg Lukas of Hungary, and Boris Paternak of the Soviet Union, as well as Stephen Spender and Arnold Toynbee, Benedetto Croce and Norberto Bobbio, Julian Huxley and Thomas Mann, Francois Mauriac, and Jean Cocteau. Later, the SEC launched the Third World national liberation ideology.

Today, the Club of Rome is the institution that represents the most concentrated essence of Venetian influence and the Venetian method. The Club of Rome wants to convince the great powers and peoples of the world to commit collective suicide by accepting the genocidal doctrine of zero growth. It also hopes to abolish the sovereign nation as a vehicle for economic growth and scientific progress.

Club of Rome founder Aurelio Peccei has just written a new book titled *One Hundred Pages For the Future*, a global review of the impact of the Club of Rome, and particularly since its 1972 release of the zero-growth model *Limits to Growth* was published, a series of social movements has sprung up under the sponsorship of the ideas in the book. These – the women's movement, the peace movement, Third World national liberation movements, gay rights, civil liberties, ecologists, consumer and minority rights, etc. – must

now be welded together into one movement for a single strategic goal: the implementation of a zero-growth international order.

The Venetian problem remains with us today. Truly, the most urgent task of this generation of mankind is to definitively liquidate the horror that is Venice and all the other Gang Clan Families who have ruled the World for 10,000 years.

The Satanic Conservative outpost of the Satanic Phoenician Navy who for 10,000 years have worshipped Molech, Baal and Cybele and Attis, and with Satanic Ritual, it's not just Sex on Altars like in Kubrick's, "Eyes Wide Shut", it is Pedophilia with Babies and Children supplied by Epstein, Dutroux or Jimmy Savile, it's Ritual Human Sacrifice, Ritual Blood Sacrifice, Ritual Burning Alive, Ritual Torture, Ritual Castration - and those Damn Liberals by Miles Mathis and Satchidanand

The founding fathers have even been sold as liberal in this sense, since although they were rich guys, fully connected, we are supposed to believe they believed in democracy, republicanism, and fairness in general. That is why they go on and on about that in the Declaration of Independence and Constitution. Those are liberal documents, in that they deny not only the divine rights of kings, they deny any other sort of favoritism based on name or birth.

As it turns out, the founding fathers were not liberal at all. They were Satanic fascists, and the whole liberal stance was just another con-job.

The United States were never meant to be republic, much less a democracy, they were meant to be another outpost of the Satanic Phoenician Navy who for 10,000 years have worshipped Molech, Baal and Cybele and Attis, and more worship with Satanic Ritual, it's not just Sex on Altars like in Kubrick's, "Eyes Wide Shut", it is Pedophilia with Babies and children supplied by Epstein, Dutroux or Jimmy Savile, it's Ritual Human Sacrifice, Ritual Blood Sacrifice, Ritual Burning Alive, Ritual Castration.

Some of my readers have been confused by my insistence that I am a liberal. These readers agree with me on a lot of things, so they can't fathom what I mean by calling myself a liberal while they consider themselves conservatives. Since it is important, I will hit it again, trying to get them to understand.

I think the difference is that I am coming at this as a student of history, while many of them are coming at it as students (or consumers) of current politics.

I haven't gotten my definitions and stances by listening to Rush Limbaugh, or Sean Hannity, I have gotten them from texts from the 19th century or earlier. My readers will answer me, "Then why don't you keep up, Holmes! This is 2020, not 1880". Good point. . . except that it isn't.

To see what I mean, let's transport ourselves back to the 1880s. Back then, satanic conservatives were those people who wished to conserve the status quo. Hence the name. They were quite satisfied with the way things were set up, and why should they not be?

They were rich and connected and had it made. Liberals were those who were not satisfied by the way things were, and so they were pushing for reforms. In general, they wished to see more fairness in government policies. They wanted those not "of the manor born" to be given a fair shot at good employment, good wages, court access, and all the various fruits of society.

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AGAINST SATANISM Vol. 6

AGAINST SATANISM VOLUME SIX

Infiltrating Bloodline Phoenician/Jewish aristocratic Families have existed for over 5000 years before the Birth of Christ. Using emotional rhetorical religious concepts to control, they worship all the Pagan Gods, including Lucifer, Satan, Baal, Bel, Molech, Ashtoreth, Cybele and Attis including all the Satanic Rituals in Against Satanism Volume 3 - RITUAL SEX, RITUAL DRUGS, RITUAL BLOOD SACRIFICE, RITUAL HUMAN SACRIFICE, RITUAL PEDOPHILIA, RITUAL TORTURE, RITUAL BURNING ALIVE, RITUAL CANNIBALISM, RITUAL CASTRATION.



In this book we find that over thousands of years, spook, Bloodline Phoenician/Jewish aristocratic Families infiltrated every country, every Empire, taking over or infiltrating every ruling aristocracy and aristocratic, bloodline family, in Europe, Britain, America, India, China and in every other country in the World.

Jewish/Phoenician aristocrats were never attached to any tiny nation, but were always one globalized trading empire from 2000BC, playing countries against each other for profit. For example using a false Flag to start a fake war between ruling elites in separate countries both of which have been allowed, built up, to become rich, but all the elites in each country coming from the same Infiltrating Bloodline Phoenician/Jewish aristocratic Families, and then buying all the assets for pennies on the dollar after the war. Not only that, giving loans to each country to prosecute the war, owning the Military Academic Industrial Complex providing materiel for the war.

Many Infiltrating Bloodline Phoenician/Jewish families who have ruled the World as one trading block for thousands of years before the Birth of Christ came from the Fertile Middle East Crescent including Lebanon, Libya, Syria, Israel, Mesopotamia-Iraq, and Persia-Iran, and had that region and all it's Empires razed many times over nonetheless, profiting from each destruction. They hop to and fro over the planet, always profiting by shifting, reshuffling and breaking their Empires.

We saw that the important conquests are not in our history books as such. Rather, Europe was colonized in the Bronze Age already, in patterns that match up with structures we see in today's spook aristocracy. The entire upper class of colonized regions was replaced by Phoenician/Jewish families, with common people unaware of it to this day. Some of this colonization is cautiously admitted, just not emphasized.

We saw that the Infiltrating Bloodline Phoenician/Jewish families always held power. The secret behind their power is simply that there is no big secret. They don't know anything special. They can't do anything special. They never achieved anything special —other than monopolizing trade. With the power to deceive from the Father of Lies, owning all the media, - The CIA, the Military Academic Industrial complex, Universities, History, Books, Magazines, Newspapers, Television, Youtube, Facebook, Google - even idiots can rule the world for millennia.

Leibniz, Papin and the Steam Engine:

A Case Study Of

British Sabotage of Science

by Philip Valenti

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The early history of the invention of the steam engine shows without doubt that the British Royal Society, including Isaac Newton personally, deliberately prevented the industrial and naval applications of steam power for nearly 100 years.

Then they murdered Papin!

In fact, the Royal Society was so intent on burying Denis Papin's 1690 invention of a paddle-wheel-driven steamship, worked out in collaboration with Gottfried Wilhelm Leibniz, that it stole his work, and created a mythical story of how two British "Newtonian" heroes, Savery and Newcomen, invented the steam engine, for the sole purpose of raising water from coal mines- a myth that has persisted in the history books until today.

As we shall demonstrate, Leibniz and Papin developed the steam engine based upon a scientific hypothesis concerning the nature of the Universe, elaborated by Leibniz in such "metaphysical" writings as his *Monadology*. The fact that modern technology emerged as a result of a purely philosophical conception, as opposed to Newton's logical/empirical ideology and his hatred of all hypotheses (other than his own), is what the British Royal Society, and its epigones, have sought to suppress.



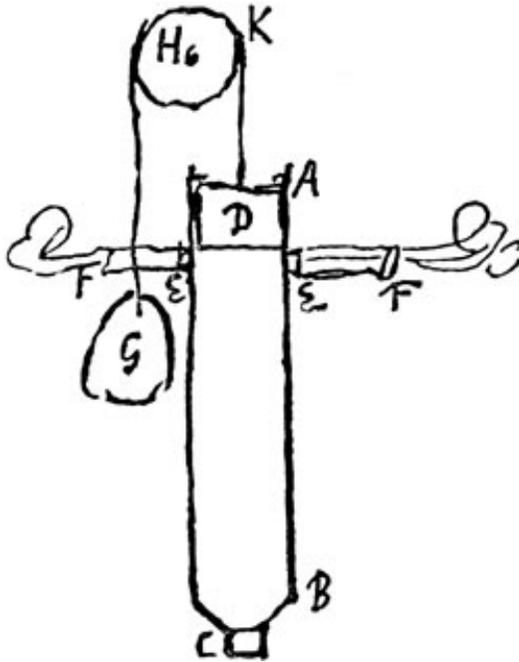
An 1883 illustration depicting Denis Papin attempting to sail his steam-powered boat on the Weser River, assailed by fearful boatmen and shippers in 1707.

The French Academy of Sciences

The project of discovering and perfecting a new source of power capable of effecting a dramatic human advance, was first initiated as a directed national effort by Jean-Baptiste Colbert (1619-1683), the minister of the young French King Louis XIV.

In 1666, Colbert established the Academy of Sciences at Paris for this purpose, recruiting the Dutch scientist Christiaan Huygens (1629-1695) as its first president. Huygens's proposed 1666 program included "research into the power of gunpowder of which a small portion is enclosed in a very thick iron or copper case. Research also into the power of water converted by fire into steam," as well as experiments with vacuum pumps, wind-powered engines, and the communication of force by the collision of bodies.

In 1672, Huygens acquired two young students and collaborators: German diplomat Gottfried Wilhelm Leibniz (1646-1714), and Denis Papin (1647- 1712?), a medical doctor introduced into the Academy by Madame Colbert. Within a year, Huygens and his new colleagues had successfully modified the von Guericke air pump into an engine capable of transforming the force of exploding gunpowder into useful work.



HUYGENS'S GUNPOWDER DEVICE

Huygens proposed to create a vacuum within a cylinder under a piston, by exploding a charge of gunpowder at the cylinder's base (see Figure 1). After the air was expelled through two valves fitted with leather collars, the collars collapsed, preventing air from reentering the cylinder. The pressure of the atmosphere then pushed the piston downwards into the cylinder, the motion of the piston being applied to perform work.

After successfully demonstrating a model gunpowder engine to Colbert, Huygens wrote:

"The violent action of the powder is by this discovery restricted to a movement which limits itself as does that of a great weight. And not only can it serve all purposes to which weight is applied, but also in most cases where man or animal power is needed, such as that it could be applied to raise great stones for building, to erect obelisks, to raise water for fountains or to work mills to grind grain It can also be used

as a very powerful projector of such a nature that it would be possible by this means to construct weapons which would discharge cannon balls, great arrows, and bomb shells And, unlike the artillery of today these engines would be easy to transport, because in this discovery lightness is combined with power.

"This last characteristic is very important, and by this means permits the discovery of new kinds of vehicles on land and water.

"And although it may sound contradictory, it seems not impossible to devise some vehicle to move through the air"

While Papin advanced Huygens's work with improved engineering designs, Leibniz proceeded, in deliberate fashion, to discover and develop the science of dynamics, and its mathematical tool, the Calculus.

Leibniz wrote that in his youth, he freed himself from "the yoke of Aristotle," rejecting scholasticism in favor of the materialist notion of "atoms and the void." Accepting Descartes's notion of matter as mere passive "extension", Leibniz attempted to work out a complete physical theory in his 1670 *New Physical Hypotheses*. However, he found that the assumption of a passive, inert matter, whose essence consists in merely taking up space, resulted in absurdities.

Consider the case, he wrote, of a small body, A, moving in a straight line with velocity V . Suppose that A encounters a much larger body, B, at rest. Leibniz concluded, that since there is nothing in the concept of mere extension to account for inertia, the body A will carry the body B along with it, without losing any of its velocity:

"This is a consequence which is entirely irreconcilable with experiments.... All of this shows that there is in matter something else than the purely Geometrical, that is, than just extension and bare change. And in considering the matter closely, we perceive that we must add to them some higher or metaphysical notion, namely, that of substance, action, and force." [emphasis in original]

As opposed to the Newtonian dogma of "hard atoms" interacting in the "vacuum" of empty space, Leibniz proposed to study the supposedly "impenetrable" interior of things (much as 20th century scientists have explored the interior of the atom), thus leading to the discovery of new and greater sources of power.

This project led Leibniz to discover the grounds for universal progress, and the basis for a new science -- dynamics. For Leibniz, matter cannot be divided linearly, like marks on a ruler, but rather in a manner suggestive of the Riemannian conception of nested manifolds, or "Worlds within Worlds." Thus, Leibniz develops his own concept of "infinite divisibility" in the *Monadology*:

"Each portion of matter is not only divisible ad infinitum, as the ancients recognized, but also each part is actually endlessly subdivided into parts, of which each has some motion of its own; otherwise it would be impossible for each portion of matter to express the whole universe.

"66. Whence we see that there is a world of creatures, of living beings, of animals, of entelechies, of souls, in the smallest particle of matter.

"67. Each portion of matter may be conceived of as a garden full of plants, and as a pond full of fishes. But each branch of the plant, each member of the animal, each drop of its humors is also such a garden or such a pond.

"68. And although the earth and air which lies between the plants of the garden, or the water between the fish of the pond, is neither plant nor fish, they yet contain more of them, but for the most part so tiny as to be imperceptible to us.

"69. Therefore there is nothing fallow, nothing sterile, nothing dead in the universe, no chaos, no confusion except in appearance"

Such an endless subdivision, Leibniz said, can account for the "perpetual and very free progress of the whole universe":

Even if many substances have already reached great perfection, nevertheless on account of the infinite divisibility of the continuum, there always remain in the depths of things slumbering parts which must yet be awakened and become greater and better, and, in a word, attain a better culture. And hence progress never comes to an end. [emphasis added]

The Development of Dynamics

Equipped with a matter containing unlimited resources ("slumbering parts which must yet be awakened"), Leibniz transcended the science of mechanics that had dominated Western thinking since Archimedes. Where mechanics pertained to the passive effects of ancient machines-- the lever, pulley, inclined plane, etc.-- dynamics was conceived as the science of the active, living force (*vis viva*, or kinetic energy) of "violent actions" - like the explosion of gunpowder, and rapid expansion of high pressure steam:

"The ancients, so far as is known, had conceived only a science of inactive force, which is commonly referred to as Mechanics, dealing with the lever, the windlass, the inclined plane pertinent to the wedge and screw though there is discussion of the equilibrium of fluids and of similar problems; only the effort or resistance of bodies and not the impetus they have acquired through their action, is discussed

"For I here refer not to any effect, but to one produced by a force which completely expends itself and may therefore be called violent; such is not the case with a heavy body moving on a perfectly horizontal plane and constantly preserving the same force; this is a harmless sort of effect, so to speak, which we can also calculate by our method, but it is not the one we wish to consider now."

Since it is limited to the study of "harmless sorts of effects," mechanics considers the total absolute force of bodies acted upon by the ancient machines, as directly proportional to the acquired velocity, or $F = mv$. In contrast, Leibniz considered the equivalence of the kinetic energy of a heavy body falling from a given height (violent action), to the work required to raise it to that height, and determined that the live force of a body in motion is directly proportional to the square of the velocity; that is, F (proportional to) mv^2 .

Leibniz's practical goal became to harness the most violent actions, for the purpose of advancing the material conditions of man. By applying the law of the conservation of vis viva to maximize the conversion of the kinetic energy of such actions into useful work, Leibniz envisioned mastering the direct force of explosions to power ships, carriages, airplanes, and factories. In contrast, how could a scientific establishment possibly invent anything useful while insisting, as the British Royal Society did throughout this period, that one's preference between measuring force by mv or mv^2 is simply a matter of personal taste, the consequence of a mere semantic quibble?

From the beginning of his study of the matter, Leibniz had insisted on the practical implications of his dynamics, particularly the issue of mv^2 versus mv , for the construction of machines and the perfection of technology. He wrote in 1695:

These things are not worthless to consider, nor are they quibblings over words, for they are of the greatest importance in comparing machines and motions. For example, if power is obtained from water or animals or from some other cause, by which a weight of 100 pounds is kept in constant motion so that within a fourth of a minute it can be made to complete a circle of 30 feet diameter, but someone else maintains that a weight of 200 pounds can in the same time complete half the circle with less expenditure of power, his calculation seems to yield a gain; but you ought to know that you are being deceived and getting only half the power

By 1675, the impact of the reactionary shift in the policies of Louis XIV, which began with the French invasion of Holland in 1672, reached Colbert's Academy. The result was a forced exodus of Protestant scientists. Leibniz left Paris reluctantly to accept a post as librarian in Hanover, while Papin left for England.

Papin's Early Inventions

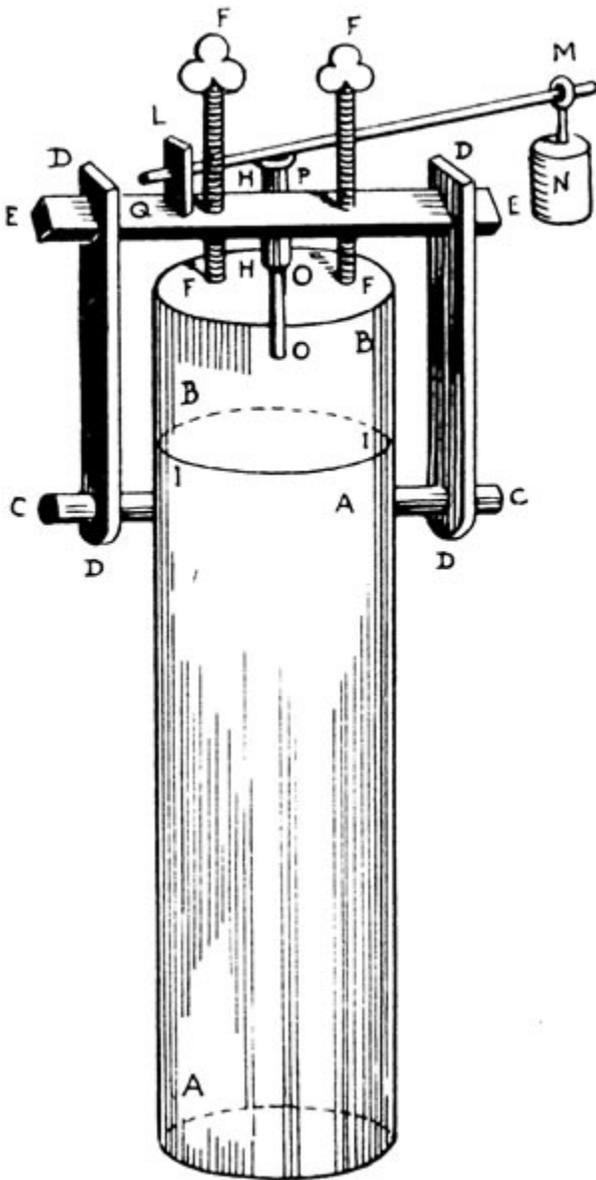


FIGURE 2
PAPIN'S DIGESTER

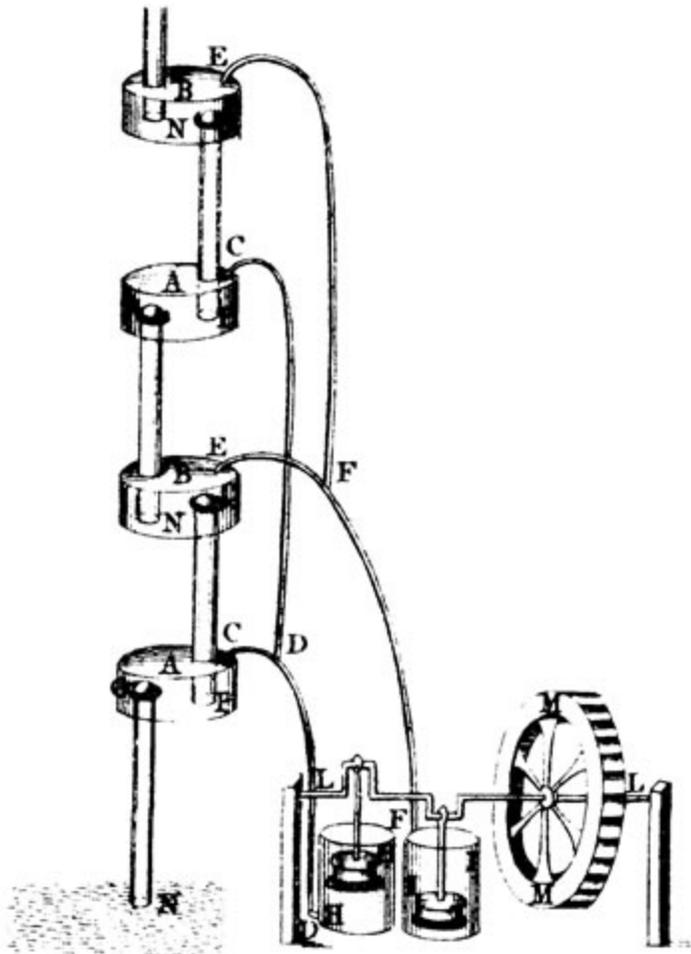


FIGURE 3
PAPIN'S PNEUMATIC FOUNTAIN

By 1680, Papin had made a major breakthrough toward controlling highly compressed steam, in the form of his "New Digester for softening Bones, etc." a steam pressure cooker. This device consisted of a cylinder with thick walls (as prescribed by Huygens in his 1666 program), in which was enclosed water along with bones, tough meat, and so forth. The whole device was then placed on a fire to cook (see Figure 2).

Although Papin's immediate motive was, as he wrote to Huygens, "to relieve poverty, and to get wholesome and agreeable foods from things that we ordinarily reject as useless," his digester was also a major advance toward the steam engine, because of a totally new feature -the safety valve. This allowed Papin safely to contain pressure many times that of the atmosphere and greater than any pressure previously controlled, limited only by the strength of the cylinder.

In 1687, Papin unveiled a new invention to transmit power pneumatically, in order to develop a means of spreading industrialization to areas where water power was not available. Papin proposed erecting two sets of pumps- one set operated by a water wheel, connected by airtight pipes to another set placed in a neighboring town or suburb. Power would be transmitted by the alternate suction and pressure exerted by the first set of pumps (see Figure 3). This idea was hotly opposed in the Royal Society, and Papin left England to accept a chair of mathematics at the University of Marburg in Hesse, bordering Hanover.

In 1690, Papin published an historic article in the *Acta Eruditorum* of Leipsig, "A New Method of Obtaining Very Great Moving Powers at Small Cost," where he proposed using the power of expanding steam to operate a piston/cylinder engine. In the new invention, steam replaced the gunpowder charge of Huygens's cylinder, creating a more complete vacuum under the piston, and thereby taking advantage of the full force of atmospheric pressure (Figure 4).

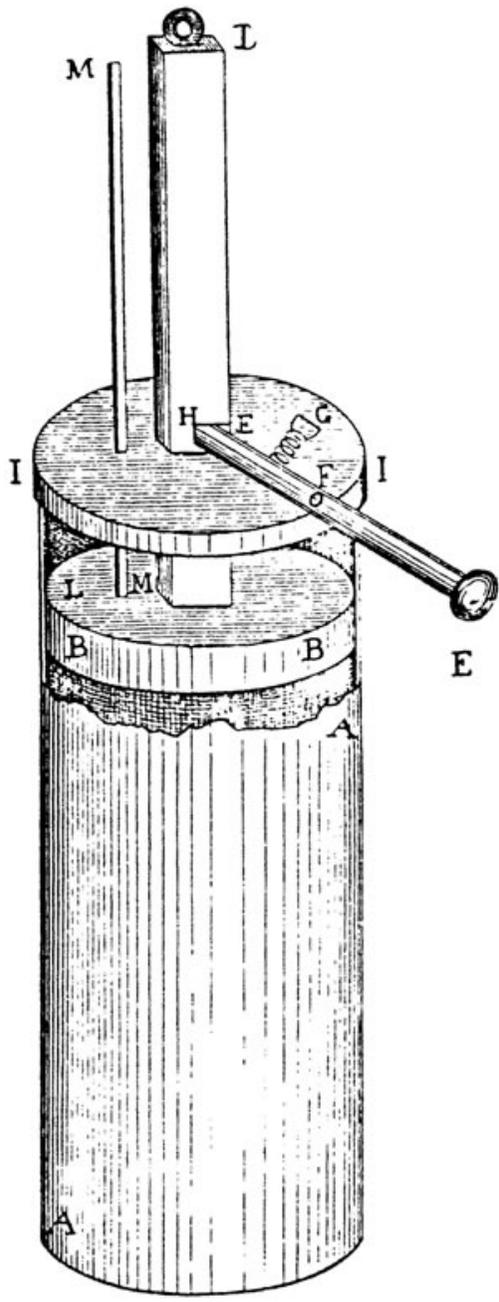


FIGURE 4
PAPIN'S 1690 ENGINE

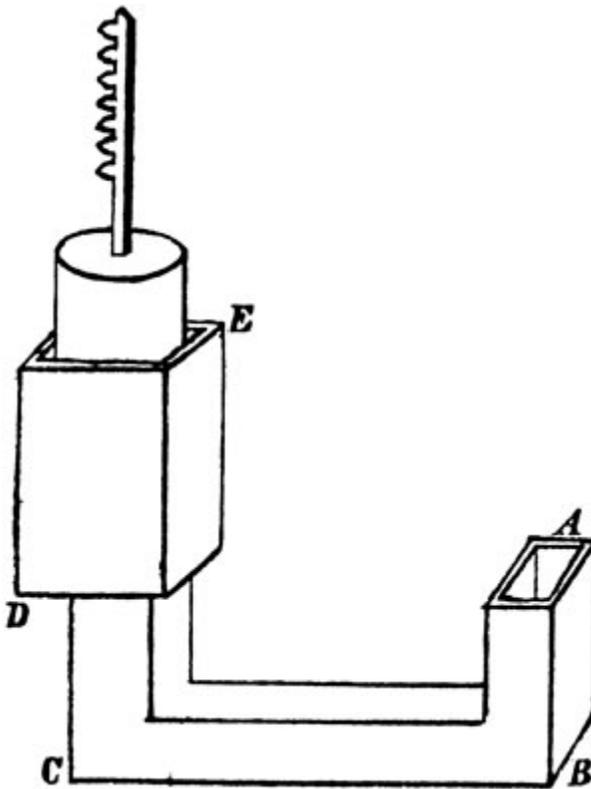


FIGURE 5
PISTON WITH TEETH FOR USE WITH PADDLEWHEEL

Papin's concept was appropriated in toto in the Newcomen engine more than 20 years later. However, although Papin mentioned in passing the utility of his invention to "draw water or ore from mines," his article featured a lengthy and detailed discussion of the application of steam power to propelling ships equipped with paddlewheels: "So, no doubt, oars fixed into an axis could be most conveniently driven round by my tubes, by having the rods of the pistons fitted with teeth, which would force round small wheels, toothed in like manner, fastened to the axis of the paddles. It would only be requisite that three or four tubes should be applied to the same axis, by which means its motion could be continued without interruption." [Figure 5]. Papin recognized the problem inherent in such atmospheric engines. Since the source of power is not the steam itself, but the pressure of the

atmosphere, the only means of increasing power is to increase the diameter of the cylinders:

The principal difficulty, therefore, consists in finding the manufactory for easily making very large tubes.... And for preparing that, this new machine ought to supply no small inducement, in as much as it very clearly shows that such very large tubes can be most advantageously employed for several important purposes.

The Leibniz-Papin Collaboration

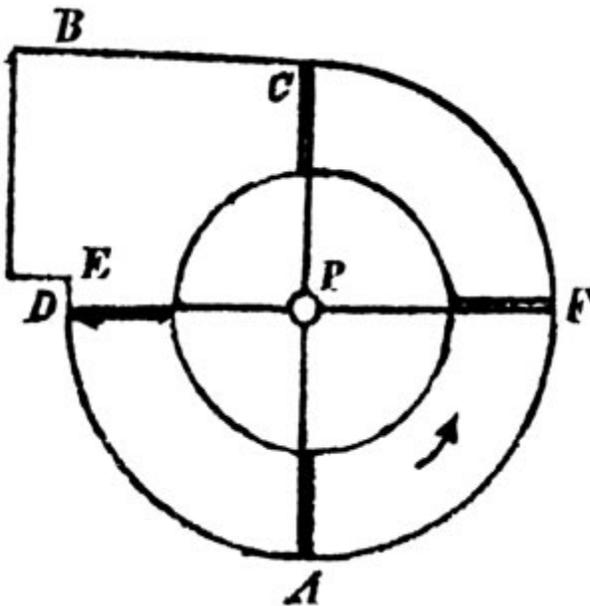


FIGURE 6
HESSIAN BELLOWS

Papin began to tackle the problem of "making very large tubes" by studying the means of refining ores more efficiently, and of manufacturing cylinders with appropriately smooth surfaces, i.e., to create the appropriate MACHINE TOOLS which would allow him to realize his ideas. This led him to the invention of an improved furnace capable of reaching higher temperatures with a more efficient consumption of fuel. Papin used another of his inventions, the Hessian bellows, to

generate a forceful down-draft in his furnace, thereby eliminating smoke and allowing a complete burn (see Figure 6).

By 1695, Papin had adapted this hotter furnace to the rapid production of high-pressure steam, by constructing the furnace so that the fire surrounded the water, allowing the maximum surface area of water to be heated directly.

With this discovery, Papin was prepared to initiate a qualitative technological advance -not a linear extrapolation from his 1690 results, such as building larger atmospheric engines, but a proposal to directly harness the violent force of the expanding steam.

In a letter dated April 10, 1698, Papin apologized to Leibniz for not having written sooner, and explained that a new project, commissioned by his employer, the Landgrave of Hesse, had taken up most of his time:

Monsgr. le Landgrave formed a new plan, very worthy of a great Prince, to attempt to discover where the salt in salty springs comes from. To reach the bottom of this, it would be very advantageous to be able to easily draw out a great quantity of water to a considerable height. I've made many tests to try to usefully employ the force of fire to this task; some succeeded so well that I was persuaded that this force could be applied to things much more important than raising water. Consequently, I've given myself totally to this work, knowing the great difficulties always to be met with in such enterprises and which can't be overcome without an extraordinary diligence. I'm presently having a new furnace built of which I've spoken to you before ... I'm building it simply to make certain large retorts of forged iron which will be very useful to produce the great effects that I expect from the force of fire. For this furnace I've also built a large Hessian bellows more perfect than those I've made before. And thus one thing leads to another.... [emphasis added].

In his reply four days later, Leibniz asked if Papin's method of raising water

"is based on the principle of rarefaction which you published before, or if it is based on some other principle; I also have a thought about it, but I want to make a little test of it in order to consult you on its performance."

Papin's historic answer follows (July 25,1698):

"The method in which I now use fire to raise water rests always on the principle of the rarefaction of water. But I now use a much easier method than that which I published. And furthermore besides using suction, I also use the force of the pressure which water exerts on other bodies when it expands. These effects are not bounded, as in the case of suction. So I am convinced that this discovery if used in the proper fashion will be most useful For myself I believe that this invention can be used for many other things besides raising water. I've made a little model of a carriage which is moved forward by this force: And in my furnace it shows the expected result. But I think that the unevenness and bends in large roads will make the full use of this discovery very difficult for land vehicles; but in regard to travel by water I would flatter myself to reach this goal quickly enough if I could find more support than is now the case It gave me much joy to find that you also have some plans to put the moving force of fire to use, and I strongly hope that the little test you told me of succeeded to your satisfaction [emphasis added].

Leibniz's concern, however, was much greater than simply using the "force of fire" to propel ships and carriages. He saw in Papin's work the unique experiment capable of irrefutably establishing the truth of his dynamical science, as well as advancing that science, by the process of applying its principles to the measurement of the thermodynamic efficiency of Papin's machines. This is the "little test" referred to in the letters above.

Leibniz wrote to Papin (July 29,1698):

"I understand very well that the force of expanding water will do much more than air pressure will do when the steam is condensed, and this is exactly what I have thought as well in regard to gunpowder But in regard to water the strain of its expansion will be less violent, [so] it would be good to see if there aren't other fluids which would be even better than

water. But water has the advantage that it costs nothing, and is available everywhere. My plan would be to do a test to discover if expanding water can usefully raise more than a column of air. But I lack workers here, and I'm too distracted But I'm now very glad to find out that you've already made the relevant experiment, and that therefore you know approximately what the force of the steam is relative to the heat and to time [emphasis added]."

Papin replied with a progress report on the construction of his engine, promising that once it was completed:

"I will try also to make observations on The degree of heat [chaleur] required to make a given effect with a given quantity of water. But up to the present all that I've been able to do, by the expansion of the steam, is to raise water to 70 feet, and to observe that a small increase in the degree of heat is capable of greatly augmenting the magnitude of the effect. And this convinces me that if these machines are perfected so that very great degrees of heat can be used, one will be able to create a greater effect with a pound of water than with a pound of gunpowder [emphasis added]."

Vis Viva Versus Mechanics

Consider the implications of the Papin-Leibniz discussion once the word effect is translated to the modern term WORK. Both Leibniz and Papin agreed that the useful work performed by a heat engine, was to be measured by the height to which it could raise a given quantity of water. In his dynamics, Leibniz had used the example of the equivalence of the work required to raise a heavy body a given height, to the vis viva acquired by the body in falling from that height. Whereas in the case of the falling body, the vis viva is measured by the body's velocity, Leibniz proposed to measure the vis viva of expanding steam by its temperature. Applying the principle of the conservation of vis viva, Leibniz developed the following sort of relation:

$$\begin{aligned} \text{vis viva consumed by machine} &= \text{useful work (height a} \\ &\text{given quantity of water is raised)} + \text{heat lost in} \\ &\text{overcoming friction} + \text{heat lost to superfluous cooling} + \\ &\quad \dots \text{ [other inefficiencies]} \end{aligned}$$

With this sort of analysis, Leibniz was prepared to compare the thermodynamic efficiencies of heat engines by measuring "the degree of heat required to make a given effect." This also

led him to the formulation of his unique experiment: demonstrating that steam can "raise more than a column of air", i.e., that the direct power of expanding steam is greater than mere atmospheric pressure.

Consider the case of Papin's 1690 steam engine. Here the atmospheric pressure alone, considered as a "column of air" resting on the cylinder, is responsible for the motion of the piston. The role of the expanding steam is simply to raise the piston back to the top of the cylinder; that is, in Leibniz's phrase, "to raise a column of air." Then, the condensed steam leaves a vacuum in the cylinder, and atmospheric pressure pushes the piston downward once again.

Leibniz proposed to demonstrate that the direct force of expanding steam, unlike mere suction, is unbounded that it can "raise more than a column of air" (Aug. 28, 1698):

"There is nothing which merits development more than the force of expansion [la dilation]; if one objects that expanded water can do no more than raise a cylinder of air, and that the stronger it [steam] is the higher it [cylinder of air] is raised, and that therefore it is sufficient to use the weight of the falling cylinder -I reply that this higher elevation requires more time, allowing the steam to gradually cool, than a quicker elevation of a heavier weight. Thus, either force is lost, or more fire must be used [emphasis added]."

Clearly at issue in this "little test" is the validity of the mechanical world view, that threatened to impose itself on emerging technology. Was steam power to be constrained to act passively, slowly pushing and pulling weights like some grotesque Rube Goldberg type of lever or pulley, or was it to be freed in all its "violence"- maximum vis viva-- to effect a qualitative human advance?

From this dynamical point of view, in fact, Leibniz was by no means convinced that expanding steam was the optimum source of power for the new technology. For him, even expanding steam was not sufficiently violent or rapid in its action, compared, for example, to exploding gunpowder or, as he suggests elsewhere, to the combustion of alcohol. He

argued as well for further work in applying the force of highly compressed air, pointing out its advantages for building lighter and more portable engines for vehicles.

The Savery Hoax

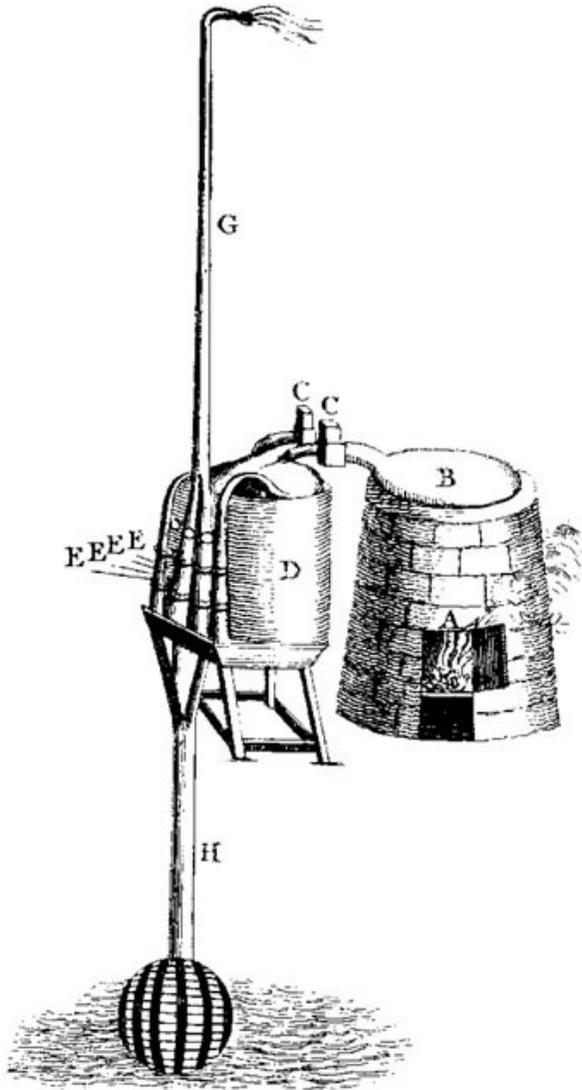


FIGURE 7
THE SAVERY ENGINE

Source: Abraham Wolf, *A History of Science, Technology and Philosophy in the 16th and 17th Centuries* (New York: The Macmillan Co., 1935)

Despite the publicity given to Papin's invention, the British Parliament awarded an exclusive patent for "Raising Water by the Impellent Force of Fire" to one Thomas Savery, variously described as a "sea captain" and a "military engineer." The terms of the patent meant that any steam-powered device Papin might invent in England would come under the control of Savery.

Although news of Savery's patent reached Germany by 1699, it was not until 1704 that Leibniz, via "Hanoverian envoys" in London, was able to acquire some sort of description of Savery's device. Leibniz forwarded a sketch of the English "engine" to Papin, along with an evaluation of its capabilities. Based on further intelligence reports from his envoys, Leibniz concluded that Savery's device could not work in full size.

Savery's "engine" consists of a chamber connected by a pipe to a source of water below, and by another pipe to a separate boiler. Steam enters the chamber from the boiler; cold water is poured on the chamber, condensing the steam, thus creating a vacuum and drawing water up the pipe from below. The steam enters the chamber again, this time for the purpose of pushing the raised water out of the chamber, and up another pipe. The steam is then forced to condense once again, creating a vacuum, and sucking more water up from below, renewing the cycle (see Figure 7).

For Leibniz and Papin, study of Savery's design provided a unique opportunity to apply and improve their new thermodynamic principles, since Savery was proposing precisely the sort of containment of steam power, within the conceptual and technological boundaries of mechanics, against which Leibniz had warned.

Papin wrote to Leibniz, describing experiments in which he had discovered that, using Savery's design, an increase in the

temperature of the steam actually resulted in a decrease of the work performed (July 23,1705):

I am persuaded that it will be useless to try to push water to great heights by the immediate pressure of steam: Because when the expanded steam strongly applies itself against the cold water, as is necessary to make it rise to a great height, it isn't possible to conserve the force of the steam; but it is immediately condensed by the coldness of the water. And the hotter the steam is, the more it violently pushes the valve, in such a way that the valve, being pushed as well by the spring which is behind, causes the water to become very agitated. The water thus agitated is much more likely to cool off a lot of steam than when its surface remains smooth. Thus I firmly believe that this is the reason which makes the elevation of the water decrease when the heat increases ...

I therefore believe that the best is to do it so that the steam doesn't directly touch the water, but that it pushes it only by the mediation of a piston which is quickly heated, and which consequently only condenses a little steam. And the surface of the piston which touches the steam always stays the same, the new steam which frequently reaches it easily maintains it in a degree of heat all the more great as the steam is hot. Thus there is no fear that the machine's effect will fail to be augmented in proportion to the increase in heat. Experiment has well confirmed my conjecture....

And the more I go forward, the more I wonder at how a small quantity of wood is capable of furnishing such force.... But... it would be desirable to work at that with more heat than made [now]: seeing principally that the use of this invention isn't limited to raising water, but that it could be applied very well to vehicles and to many other things where force is needed."

Leibniz fully approved of Papin's successful application of his thermodynamics, advising him not to take Savery's claims of success too seriously (Aug. 15,1705):

I am delighted that your fire engine advances so well, because when it is brought to perfection, I consider that it will be very useful. Also, it would be a mere trifle if only one-third of the

expense would be saved, as the English author believed, since this advantage would be easily absorbed by other inconveniences which such a great alteration of machines would attract. It is very reasonable also to believe that too diffuse steam applied directly to cold water will condense and lose its force. Consequently, it is better to keep them self-contained [renfermees].

According to the Royal Society myth, this sort of reasoning about the steam engine was not supposed to have occurred until about 1769, when James Watt recognized the problem of loss of force because of superfluous cooling of the steam, and invented a separate condenser. Watt was motivated in this invention by the knowledge that the Newcomen engine would operate much more efficiently, if its cylinder was kept constantly hot, while the condenser was kept constantly cold; that is, "it is better to keep them [steam and cold water] self-contained."

In effect, Savery proposed to doom steam to play the role of the ancient horse-driven windlass (hoist) and pulley, slowly pulling water up one pipe and pushing it out of another, with one significant difference - Savery's "fire engine" was much more expensive.

Savery's fraud was recognized as such by crafty miners, and his engine was used mostly to raise water for the fountains of wealthy aristocrats. As even the British historian A. Wolf admits, "It was costly and dangerous, so the mine owners stuck to horses."

Savery included an interesting comment on ships in his second chapter, "Of the Uses That This Engine May Be Applied Unto," indicating that it apparently had been made clear in England that the authorities would frown on any drastic technological advance in this area. As Robert Fulton later understood, a successful steamship could be the greatest threat to continued Anglo-Dutch commercial and naval superiority.

Savery fearfully noted, "5. I believe it may be made very useful to ships, but I dare not meddle with that matter, and leave it

to the judgment of those who are the best judges of maritime affairs."

A few pages later, he added, "As for fixing the engine in ships, when they may be thought probably useful, I question not but we may find conveniency enough for fixing them."

These two timid-passages apparently constitute the totality of published British commentary on the steamship during most of the 1700s. Meanwhile, Leibniz had become fully committed to seeing a steam-powered vehicle perfected and built within his lifetime -whether a steam boat, a steam carriage, or an airplane. But while Savery and his colleagues could obstruct science at their leisure in the relative peace and quiet of Gresham College, Leibniz and Papin struggled to advance science as rapidly as possible, living in the direct line of march of an invading French army.

War Pressures

Leibniz had barely dissuaded Papin, pressured by the war situation, from accepting a Royal Society invitation to take up his old post as curator of experiments -an offer made to him, interestingly enough, just after Parliament had granted Savery his exclusive patent in 1699. If Papin had gone to England at that point, all of his experiments in steam power would have come under Savery's legal control.

The situation was so unsettled in Germany that Papin was afraid to visit Leibniz in Hanover, for fear that his family would be caught alone in a French attack. He concluded that no continued scientific progress would be possible without an end to the war. He wrote to Leibniz in 1702, describing his experiments with a ballistic air pump capable of throwing "a weight of 2 pounds to a distance of 40 feet" and designed eventually "to facilitate the capture of the strongest positions." Papin argued that this invention not only would help bring peace, but also would be the best enticement for princes and generals to support further research into steam technology.

After a year of strenuous efforts to interest the leaders of the anti- French alliance in his invention, Papin reported to

Leibniz (Feb. 25,1704), "It has been possible since then to receive a reply neither from England nor from Holland; therefore all that I can conclude is that there is only some secret reason why no one wants to accept my proposal."

Leibniz continued to maintain friendly pressure on Papin throughout 1704, insisting that he resume research into applying violent force (particularly that of gunpowder) to the propulsion of ships and to carriages, if not to airplanes. Leibniz argued that such a breakthrough would have the greatest world strategic impact:

"Yet I would well counsel [you], Monsieur, to undertake more considerable things which would force everyone to give their approbation and would truly change the state of things. The two items of binding together the pneumatic machine and gunpowder and applying the force of fire to vehicles would truly be of this nature."

Papin finally agreed, and in a letter March 13, 1704 he revealed that he had already built a model paddlewheel boat "which can carry about 4,000 pounds", and that he had developed a complete theory of rowing "which can also be applied to land vehicles."

By January 1705, Papin had received Leibniz's sketch of Savery's engine. Of course, this had the expected effect on Papin's thinking, as well as on the attitude of the Landgrave of Hesse, who took a renewed interest in Papin's work. In March, a newly self-confident Papin wrote to Leibniz:

I can assure you that, the more I go forward, the more I find reason to think highly of this invention which, in theory, may augment the powers of man to infinity; but in practice I believe I can say without exaggeration, that one man by this means will be able to do as much as 100 others can do without it. All that I've done up until now has only been to discover the characteristics of this machine and the different symptoms to which it may be subject [a reference to the analysis of the thermodynamic efficiency of Savery's device discussed above-PV]. But Monseigneur from now on wants to apply it to some real use, and his Highness gave me the honor of commanding

me to apply this force to turn a mill to grind wheat And if after the mill we can proceed to apply this invention to ships [voitures par eau], I would believe this discovery incomparably more useful than finding longitudes on the ocean, which has been sought for so long."

By the end of 1706, Papin's experiments had convinced him of the explosive strategic potential of steam technology:

"Yet it's a great shame that the things from which the Public could derive such considerable usefulness aren't impelled by heat. Because the advantages which this invention could furnish for sea-going vessels alone, without counting those of land vehicles, would be incomparably greater than all expected from the transmutation of metals."

A Genuine Steam Engine

What Papin achieved within two years of receiving Leibniz's sketch of the Savery device, was a genuine direct action steam engine capable of being immediately applied to ships. Papin's engine successfully incorporated the dynamical innovations of 40 years of research that began with the project initiated by Huygens in Colbert's Academy. This achievement is fully documented in Papin's 1707 treatise, "New Method of Raising Water by the Force of Fire," published in Latin and French at Cassel. (This booklet is available today in select university libraries because someone in France had foresight to reprint 250 copies of it in 1914.)

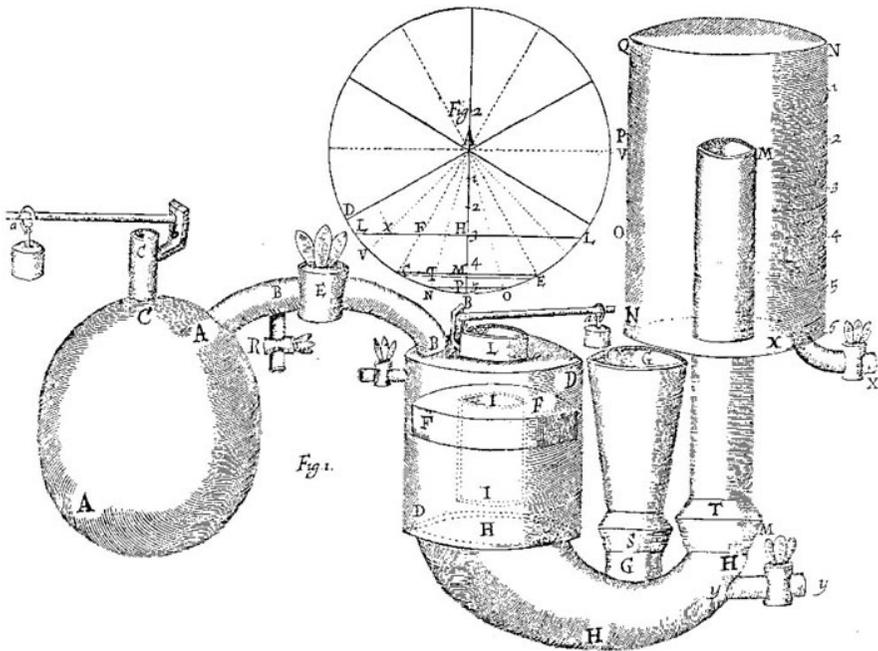


FIGURE 8
PAPIN'S 1707 STEAM ENGINE

Papin's engine, shown in Figure 8, works as follows, with each step representing an innovation as a result of dynamical considerations. The engine is to be situated such that there is a constant flow of water into the pipe G. In this way, the water to be pumped enters the cylinder DD through H; the piston FF is then raised to the top of the cylinder by the weight of the water.

The copper vessel AA, which Papin calls the retort, is completely enclosed in a furnace, not shown. The furnace is designed to allow the fire to completely surround the retort, with precautions made to guarantee minimum loss of heat to the outside air.

The retort is supplied with a safety valve ab to allow a maximum controlled increase in steam pressure. The robinet, or spigot, E is opened, allowing the high-pressure steam to rush into the cylinder.

The opening L and the receptacle II are provided to allow insertion of hot irons in order to increase the violence of the steam, which is allowed to reach a controlled maximum with attention to the second safety valve ab.

The fulminating, expanding steam acts directly against the cold water through the mediation of the piston FF, arranged so that the surface of the piston encountering the steam remains hot, while the opposite surface remains relatively cold. The action of the steam on the piston forces the water out through H and up through the valve T. into the closed vessel NN. As NN fills with water, the air within NN is compressed.

The compression of the air in NN is allowed to increase until the robinet at the lower right of the vessel is opened, allowing the raised water to exit forcefully through pipe XX.

The resulting high-velocity jet of water encounters an improved paddlewheel, designed according to Papin's Fig. 2 (shown here in Figure 8). Papin's figure illustrates the advantages of adding blades to a mill wheel in order more completely to convert the energy of high velocity water into rotative motion.

With this design, technology entered a new, dynamic universe. In a certain sense, it represents a transition, in that modern thermodynamic principles are applied to the ancient task of turning a water wheel. However, Papin intended immediately to apply his new engine to power the model paddlewheel boat, which he had constructed three years earlier.

In the preface to his 1707 treatise, Papin gives Leibniz full credit for providing the necessary impetus to advance his experiments. In particular, Papin cites two crucial junctures - the 1698 discussions on harnessing the direct force of steam versus mere atmospheric pressure, and the 1705 description of Savery's device that Leibniz's spies procured in London.

The quality of analysis in the treatise also shows the effect of Leibniz's firm theoretical commitment to "live force", combined with Papin's repeated experimental vindications of

Leibniz's dynamics over the past 40 years. Papin concludes the first chapter, describing the furnace enclosing the retort:

5. The reason which obliges us to have such a great care to augment and conserve the heat [chaleur] is because it is the heat which makes all the moving force in this machine. Because otherwise in ordinary pumps it is animals, rivers, the wind or some other thing of this nature which employs their force in order to drive the piston in the pump and expel the water, here it is only the heated steam in the retort AA which travels with violence through the pipe ABB whenever the robinet E is opened, and goes to press the piston in the pump DD. And the force of this steam is even greater the more we give it a higher degree of heat.

In chapter 3, Papin comments on the "means to augment the effect of the machine":

2. The augmentation of effect of which I have just spoken [that is, increasing the diameter of the pipes, and so on] is a little thing in comparison to that which could be obtained in augmenting the pressure in the retort AA: Because that of which I've spoken until now in order to impel [pousser] the water to 64 or 65 feet is equivalent to only two times the ordinary pressure of air: But it's certain that the pressure may be made much greater yet; with digesters or machines to cook bones, which weren't at all completely enclosed in their furnace, as is the retort M here, I sometimes achieved pressures equivalent to 11 times the pressure of air. Thus one may boldly say that the retort, being as well heated as it is and with the aid of hot irons enclosed in the pump DD, that pressures may be created much more than 6 times greater than that necessary to impel water to a height of 64 feet: and in such a case one man could create almost as much of an effect as 500 others who have only those inventions used up to the present.

As for Savery's design, Papin describes in detail in chapter 5 how the Savery device was inferior to his own "in order that there be no misjudgment in the choice that will be made between Mr. Savery's machine and this one." First, Papin notes that since the retort M is "completely in the fire, it can

be heated much more promptly and at less cost than the two vessels that Mr. Savery calls boillers."

Second, Papin notes that his piston system ensures that the "steam loses none or very little of its force," compared to the condensation that occurs in the Savery device. Third, Papin describes his improvement that "allows the water to enter by its own weight into the pump DD, and not by suction" and writes, "without this correction, the inconveniences of which I've spoken about in this section would be enough to render the machine completely useless." Fourth, Papin notes the improvement of introducing hot irons to increase the "violence" of the steam. Then, "in order to incontestably prove that the piston FF is necessary to raise water to any considerable height," Papin reports that Savery's method completely failed to pump water "into air which had been a bit compressed.... Instead, a good effect is always created with the piston, even if the resistance of the compressed air in NN is 10 or 12 times greater than that which was impenetrable without the help of the piston."

Leibniz wasted no time in beginning the process of improving Papin's design. In his last published letter to Papin (Feb. 7, 1707), Leibniz not only suggested that the engine be made completely self-acting, and thus more appropriate to moving vehicles, but also proposed practical means of still further increasing the thermodynamic efficiency of the engine by the ingenious use of the so-called waste heat:

"I maintain that for stationary machines or for seagoing vessels, it will be difficult to make anything better along similar lines....

"I have a thought that perhaps will not displease you, which is to efficiently use the still-hot steam which leaves the pump when the piston is pushed up. Because it would be a great shame to lose it entirely. I imagine that in leaving it yet has much heat, and enough force to issue forth despite the outside air Then to make good use here of heat, otherwise superfluous, and at the same time of compressed air, in a manner which perhaps has never been used, I would make a sort of mantle or case ZZ around your vessel QN, partly filled

with compressed air; and within this case I would let the steam enter in such a way that before it streams powerfully into the open air it would be between the case and the vessel. And while it warms this vessel it would as a result contribute towards the work of the compressed air contained therein. I believe that this will be a redoubling of the force and thus a mediocre vessel QN would make a much greater effect. Because it is already certain that heat gives as much force to ordinary air as does compression, and the same heat would give double or triple to compressed air The continual passage of hot steam would make this vessel extremely hot, almost as if it had been placed on a fire.

"I have always had the thought that a great effect could be made and much force placed in a small volume by means of air strongly compressed and then heated. This would be of great use for machines which must be portable.

"To say nothing of the superfluous heat of the furnace and the smoke which emerges from it which can be similarly useful among other ways by heating the water of the funnel G and of the tube H in order that the coldness of this water harms less of the heat in the pump D or in the vessel QN.... Furthermore, I have no doubt that you could, if you so desired, easily arrange that the robinets E and n are alternately open and closed by the machine without having to use a man for this."

The "Newton-Leibniz Controversy"

Although Leibniz and Papin had succeeded in bringing modern dynamical technology into being, making possible the industrial transformation of society, they were working within an increasingly aversive environment. Leibniz's persistent international efforts on behalf of what he called the "Grand Design"-- an alliance of sovereign nations for economic development through scientific and technological progress-- had brought him into increasing conflict with his employer, George Ludwig, the Elector of Hanover, and future British King George I.

Whereas George Ludwig was in the pay of the British financial oligarchy based in the City of London, his mother, the brilliant

Electress Sophie, was Leibniz's dedicated philosophical protege. Until her untimely death in 1714, Sophie was next in line to become Queen of England! The massive Royal Society attack against Leibniz on the false charge of plagiarism of the Calculus from Newton, which erupted in 1711, was a politically-motivated slander campaign designed to destroy Leibniz's influence in England. Yet, the influence of Leibniz's ideas grew on the European continent, and, significantly, in America as well. [see EIR, Dec. 1, 1995, "The Anti-Newtonian Roots of the American Revolution...."]

During this period, even before the publication of his treatise, Papin had reported a sharp escalation in harassment by his unnamed enemies in Hesse. As a result, the relative tranquility of London again became attractive to him, and he resolved to go to England to demonstrate before the Court and the Royal Society the incontestable superiority of his steam engine over Savery's device.

Papin's plan was to travel to London in his paddlewheel boat, rowing it by conventional means up the Weser River, through Hanover to Bremen, and across the North Sea. Once in London with his model boat and with sufficient means to build an adequate steam pump, Papin planned to operate the world's first steam-driven ship and navigate it up the River Thames. In fact, the main reason which Papin gave to the Landgrave for his desire to leave for London, was that only such a seaport had sufficient depth to apply his engine to a ship.

In a letter to Leibniz Sept. 15, 1707, Papin reported on the first successful test of his paddlewheeler:

"At present I will tell you that the experiment of my boat was made and that it succeeded in the manner that I had hoped of it. The force of the river's current was such a little thing in comparison to the force of my oars that it was difficult to recognize that it went faster in descending the current than in climbing it. Monseigneur had the goodness to testify to me of his satisfaction in having seen such a good effect. I am

persuaded that if God gives me the grace to arrive safely in London and to make vessels there of this new construction which have enough depth to apply the fire engine to give movement to oars, I am persuaded, I say, that we may produce those effects which will appear incredible to those who will not see them."

In the same letter, Papin renewed a request to Leibniz to help obtain the required permission from the Elector of Hanover for passage up the Weser. Leibniz could expect no cooperation from George, but he tried to intervene with his friends among local magistrates along the river. However, Papin got no further than Munden before encountering the ignorant opposition of the Boatmen's Guild, no doubt incited by elements of George's Court. Leibniz received the following report from an official of Munden, Sept. 27, 1707:

"Having been informed by the Doctor Papin, who, coming from Cassel, passed by this town the day before yesterday, that you are presently to be found in this Court [Berlin], I give myself the honor to advise you, Sir, that this poor man of medicine, who gave me your letter of recommendation for London, had the misfortune to lose here his little machine of a paddlewheel vessel, . . . the Boatmen of this town having had the insolence to stop him and to take from him the fruit of his toil, with which he thought to introduce himself a before the Queen of England"

Despite the tragic encounter with this "mob of boatmen," Papin continued on to London, only to encounter an even more vicious mob--the British Royal Society, at the time headed by president-for-life Isaac Newton, and by Newton's secretary Hans Sloane.

Royal Antiscience

When he arrived in England, Papin presented a copy of his treatise to the Royal Society along with the following proposal, recorded in the Royal Society Register, Feb. 11, 1708:

"Proposition by Dr. Papin, concerning a new invented boat to be rowed by oars, moved with heat:

" It is certain that [it] is a thing of a great consequence to be able to apply the force of fire to save the labour of man; so that

the Parliament of England granted, some years ago, a patent to Esquire Savery, for an Engine he had invented for that purpose; and His Highness Charles, Landgrave of Hesse, has also caused several costly experiments to be made for the same design. But the thing may be done several ways, and the machine tryed at Cassel differs from the other in several particulars, which may afford a great difference in the quantity of the effect. It will be good, therefore, to find out clearly what can be done best in that matter, that those which will work about it may surely know the best way they are to choose. I am fully persuaded that Esquire Savery is so well minded for the public good, that he will desire as much as any body that this may be done.

" I do therefore offer, with all dutyfull respect, to make here an Engine, after the same manner that has been practised at Cassel, and to fit it so that it may be applied for the moving of ships. This Engine may be tryed for an hour and more, together with some other made after the Saveryan method. The quantity of the effect should be computed both by the quantity of water driven out of each machine, and by the height the said water could ascend to

" I wish I were in a condition to make the said Cassellian Engine at my own charges; but the state of my affairs does not [allow] me to undertake it, unless the Royal Society be pleased to bear the expense of the Vessel called Retort in the description printed at Cassel; but after that I will lay out what is necessary for the rest, and I will be content to lose that expense, in case the contrivance of the Landgrave Of Cassel doth not as much again as that of Esquire Savery; but in case the effect be such as I promise it, I do humbly beg that my expense, time and pains, may be paid, and I reckon this to amount to 15 pounds sterling. If the Royal Society be pleased to honor me with their commands upon such conditions, the first thing to be done is to let me see the place where the Machine must be set, and I will work for it with all possible diligence and I hope the effect will yet be much greater than I have said [emphasis in original]."

By 1708, the Royal Society had all but abandoned even the pretense of scientific inquiry, and so its attitude toward Papin's proposal (as well as others) for real technological advance was predictably negative. In Papin's case, the repeated mention of the name Leibniz in his treatise was sufficient to trigger Royal Society killer instincts.

The Transactions of the Newcomen Society, Volume 17 (1936-37), contain a succinct account of the fate of Papin's proposition:

"Papin, then at Cassel, submitted with his paper, a request for fifteen guineas to carry out experiments, but the Royal Society, like our own, did not hand out fifteen guineas at a time. Instead, the matter was referred to Savery in 1708, and in his letter of criticism turning down Papin's design there is a passage in which he damned the cylinder and piston, saying it was impossible to make the latter work because the friction would be too great! [emphasis added]"

Papin then argued for his proposal before Newton himself, who rejected it on the pretext that it would COST TOO MUCH. Papin was then stranded in England without any means of support, completely at the mercy of Newton, Sloane, and Savery, whose exclusive patent covering all conceivable "fire engines" was still in effect. Papin's 1707 "Proposition" was thus the last heard of any practical plan for a steamship or for early application of steam power, besides pumping mines, until the intervention of Benjamin Franklin's networks in England later in the century.

No record remains of Papin's subsequent activity in England besides a mere seven letters to Sloane, mostly repeated requests for money to carry out a variety of experiments. In his last letter to Sloane, Jan. 23, 1712, Papin complained that a number of his inventions presented before the Royal Society had deliberately not been registered under his name:

"So there are at least six of my papers that have been read in the meetings of the Royal Society and are not mentioned in the Register. Certainly, Sir, I am in a sad case, since; even by doing good, I draw enemies upon me. Yet for all that I fear nothing because I rely upon God Almighty."

The Newcomen Fraud

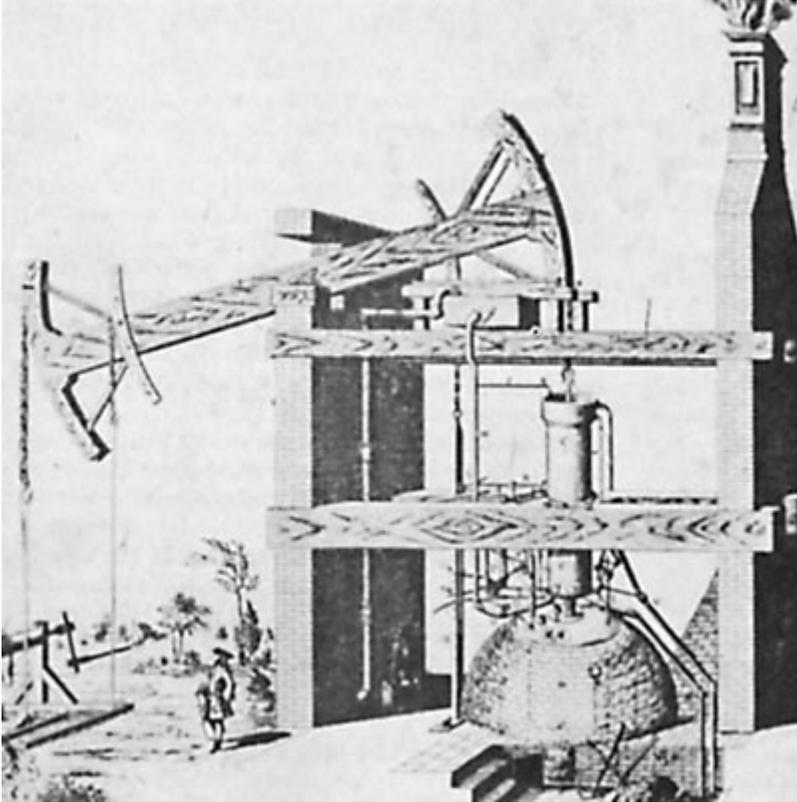


FIGURE 9
NEWCOMEN'S ENGINE

In 1712, Papin apparently vanished without a trace-- not even a death notice.

That same year, as the witchhunt against Leibniz was reaching frenzied heights in England, Thomas Newcomen suddenly appeared to build his fabled fire engine "near Dudley Castle."

Newcomen's engine was simply a scaled up atmospheric steam pump that was based completely on a combination of two of Papin's earlier ideas:(1) the use of steam to create a vacuum and drive a piston (1690); (2) the use of a lever

mechanism to transmit power from one pump to another (1687).

In Newcomen's atavistic design, steam enters a cylinder under a piston from a separate boiler (see Figure 9). Cold water is poured over the cylinder or is sprayed inside of it, condensing the steam and creating a vacuum; the piston is forced downwards by atmospheric pressure. In turn, a piston rod pulls down one end of a balance beam that operates an ordinary mine pump attached to the other end of the beam, and placed down a mine shaft. Steam reenters the cylinder, merely counterbalancing atmospheric pressure; the piston is then raised back to the top of the cylinder by the weight of the water pump apparatus, and the cycle is repeated.

Compared to the level of conception and design achieved by Papin, Newcomen's "exotic lever" is manifestly primitive, and a great step backwards. Not only is the force of the engine limited to mere atmospheric pressure, and the design limited to raising water from mines, but Newcomen still insisted on alternately cooling off and heating up the same cylinder, wasting tremendous amounts of steam, and consuming massive quantities of coal. For this reason, his engine was used mainly by the owners of the coal mines themselves, who could afford the fuel.

The calculated result was a near 100-year containment of steam technology, which was overcome only by the intervention of Leibniz's intellectual heirs in America.

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Chronology: Steam Power Versus The Royal Society

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1666: Louis XIV's Minister Jean Baptiste Colbert establishes the Academy of Sciences, appointing the Dutch scientist Christiaan Huygens as the academy's president. Huygens program includes "research into the power of water converted by fire into steam."

1672: Papin and Leibniz join the Academy.

1673: Huygens successfully demonstrates his gunpowder-fueled engine, suggesting that his invention "permits the discovery of new kinds of vehicles on land and water. And although it may sound contradictory it seems not impossible to devise some vehicle to move through the air."

1675: Leibniz completes his development of the differential calculus. Anti-Colbert factions force Papin, Leibniz, and later Huygens to leave France.

1680: In London, Papin continues research into control of high pressure steam; he invents the steam pressure cooker and safety valve.

1687: Papin proposes the pneumatic transmission of power from water wheels near rivers to remote regions in order to facilitate the rapid spread of industrialization.

1690: The Steam Age begins with Papin's invention of the atmospheric steam engine; Papin proposes its application to powering a paddlewheel- driven ship.

1692: Papin and Leibniz begin intensive correspondence.

1695: Papin publishes a summary of his inventions, including the Hessian bellows, an improved furnace designed to

multiply efficiency, the pumping of mines using the pneumatic transmission of power, the atmospheric steam engine, and the "plunging boat" (submarine).

1697: Papin's summary is reviewed in the Philosophical Transactions of the British Royal Society and circulated throughout England.

1698: Papin constructs a steam-powered atmospheric pump. Leibniz and Papin begin the project of harnessing the direct force of high pressure steam; Papin constructs "a little model of a carriage that is moved forward by this force."

1699: Thomas Savery is awarded an exclusive patent for the "fire engine" by the English Parliament.

1704: "Hanoverian envoys" to London smuggle Savery's blueprints back into Germany; Leibniz concludes that Savery's design could not work in full size.

1707: Papin publishes a complete account of his direct action steam engine, and tests it successfully against Savery's design.

1708: In London, Papin proposes that the Royal Society allocate 15 pounds sterling to allow him to construct his engine "and to fit it so that it may be applied for the moving of ships. This Engine may be tried for an hour and more, together with some other made after the Saveryan method." Royal Society president-for-life Isaac Newton, backed by Savery, rejects Papin's proposal.

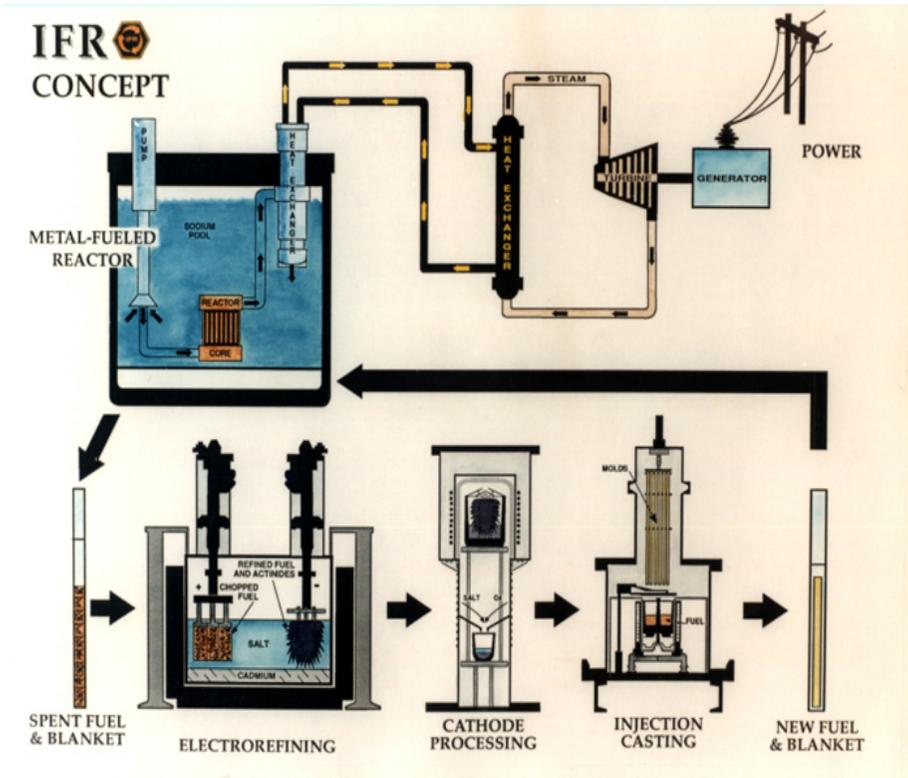
1708-1712: The Royal Society appropriates Papin's researches without remuneration.

1712: Papin "disappears." The first Newcomen engine, limited to pumping water from flooded mines, is erected.

1807: American artist, inventor, and diplomat Robert Fulton achieves the world's first commercially successful steamship voyage with his Hudson River paddlewheeler, The Clermont. Fulton proposes that his inventions, including the submarine and the torpedo, be applied forthwith to destroy the "monstrous government" of England.

THE SATANIC SUPPRESSION OF THE INTEGRAL FAST REACTOR (IFR) FOURTH GENERATION NUCLEAR POWER PLANT

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NO POLLUTION

NO OIL COMPANIES

NO COAL COMPANIES

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"In the decade from 1984 to 1994, scientists at Argonne National Laboratory developed an advanced technology that promised safe nuclear power unlimited by fuel supplies, with a waste product sharply reduced both in radioactive lifetime and amount. The program, called the IFR, was cancelled suddenly in 1994, before the technology could be perfected in every detail. Its story is not widely known, nor are its implications widely appreciated. It is a story well worth telling, and this series of articles does precisely that." ---

excerpt from *Plentiful Energy* and the IFR story by Charles Till

IFR story is a story of how the US government paid billions to our National Laboratories to engineer a solution to the energy and climate crisis (before it became a crisis), the solution worked!!

A nuclear power plant design invented at Argonne National Lab 24 years ago has none of the drawbacks of conventional nuclear plants.

To control climate change, we must get rid of virtually all carbon emissions from coal. To do that, we need a way to generate power for a cost less than coal, that can generate power reliably 24x7, and that can be constructed virtually anywhere. Solar and wind don't meet the need; that is why even environmentally progressive countries such as Germany are still building coal plants. But we have a technology that can displace coal, but it is not well known. It was a billion dollar government research project...over 10 years at our top government national laboratory for energy (Argonne National Laboratory)...the largest energy research project in our history. Our government had finally done something truly visionary and great! But the project was quashed by President Clinton in 1994 because Clinton said it was unneeded and the scientists who worked on it were ordered to remain silent. One of our country's leading experts on global warming, Jim Hansen, recently re-discovered the IFR. Those who have been briefed on the IFR believe it is an essential technology we must develop to combat climate change and should be restarted immediately. This led to Hansen including restarting 4th generation nuclear power as one of his 5 top priorities for President Obama (see the bottom of page 7 in Hansen's *Tell Barack Obama the Truth -- The Whole Truth*).

The DOE tried to restart it under GNEP, but Congress has zeroed the funding for GNEP (not for reasons relating to the IFR which nobody in Congress knows anything about). Talk about snatching defeat from the jaws of victory.

California Lt. Governor John Garamendi flew in the top IFR scientists and convened a meeting of experts in the field including one Nobel prize winner (Burton Richter, former Director of SLAC). Garamendi came away impressed and convinced that this is something we must do and is working to take the next steps in California.

by Steve Kirsch

August 10, 2008

Until now, I have been pretty agnostic about nuclear power. In fact, in May 2006, I wrote an op-ed for the San Jose Mercury News on why we shouldn't pursue nuclear power as a solution for global warming which infuriated the pro-nuclear people.

After reading Hansen's newsletter (where I first learned about the IFR) and doing months of research on the IFR listening to arguments on both sides, I've changed my opinion. And some really smart friends of mine have read the stuff below, done their research, and their minds have changed as well. In fact, I don't know anyone with an open mind who has met with the scientists who worked on the project who hasn't come away impressed. Even the harshest critics of the IFR admit that that they might be wrong.

I first heard about the IFR on August 4, 2008, in an email I received from James Hansen who is one of our nation's top climate experts. The email summarized his recent trip overseas to meet with foreign leaders.

The two most important things that Hansen tells foreign heads of state are (from page 5):

Annual CO₂ emissions, and thus percent reduction of annual emissions, is not an appropriate metric for controlling climate change. Instead, we must limit the total fossil fuel CO₂ emission.

Phase-out of coal emissions is the sine qua non for climate stabilization.

In other words, if we don't get rid of coal plants all over the planet, we're completely hosed. The sooner we do that, the better. Getting rid of every single coal plant is the single most important thing we can do to slow down global warming. If we cannot do that, then nothing else matters. We are basically re-arranging deck chairs on the Titanic. We will go down with the ship.

Displacing coal plants is hard because they are really cheap (since the utilities are not assessed of their pollution), they can be built anywhere where water is available (all thermal power plants, fossil or nuclear, have to be able to get rid of excess heat), and because they provide power 24x7. That's why every week to 10 days, another coal-fired power plant opens somewhere in China that is big enough to serve all the households in Dallas or San Diego.

Getting rid of them is hard. Even with all the awareness about the harm of coal plants to the environment in the US, we have been unsuccessful in displacing them. Today, we still get 49% of our electric power from coal plants. If we can't displace coal plants in the US, how can we expect other countries, like China, to displace their coal plants?

Fundamentally, to get rid of coal plants and have any hope at all on controlling climate change, you must to come up with a power plant capable of 24x7 operation that can be built anywhere that is just as cheap (or cheaper) to build and operate as a coal plant. If you had that, then you'd have an economic incentive for people to make the environmentally responsible choice. There would be no reason to build coal plants anymore.

So if the US developed a way to generate electric power that had no CO2 emissions, was as cheap as coal, and provided 24x7 power, and could be built anywhere, and didn't require a lot of land to build, and was very safe, and didn't increase the

risk from terrorism then that would be a great thing. It would mean that China would have an economic incentive to build these plants rather than coal plants.

We don't have that now. Concentrated solar plants can only be economically built in certain locations. Same for wind power. And both are intermittent sources (although if you have enough wind power over enough area in the right corridor, it can be pretty reliable).

Such an invention would, quite literally, save the planet from destruction. It would be the "holy grail" in the fight against global warming. It would arguably be the most important invention in history.

So you'd think that if such an invention existed, everyone would know about it, wouldn't you?

Well, would you believe that our top energy scientists invented a technology that does all those things and more! These plants can also get rid of the waste from existing nuclear power plants! And unlike nuclear plants where there is only a finite amount of nuclear material available (I think about 100 years), these plants make their own fuel so they will last 100,000 years. Remember Einstein's famous $E=mc^2$? The point is that if you do it right, a little bit of matter can make a lot of energy.

And would you believe the research was done more than 20 years ago in 1984 by a large group of US scientists at Argonne National Laboratory?

The Integral Fast Reactor (IFR) is a fourth generation nuclear design that provides a clean, inexhaustible source of power, cheap, with virtually no waste, inherently safe (if you remove the cooling, it shuts down rather than melts down), and the added benefit that it consumes the nuclear waste from other nuclear plants that we can't figure out how to get rid of.

Advantages include:

It can be fueled entirely with material recovered from today's used nuclear fuel.

It consumes virtually all the long-lived radioactive isotopes that worry people who are concerned about the "nuclear waste problem," reducing the needed isolation time to less than 500 years.

It could provide all the energy needed for centuries (perhaps as many as 50,000 years), feeding only on the uranium that has already been mined.

It uses uranium resources with 100 to 300 times the efficiency of today's reactors.

It does not require enrichment of uranium.

It has less proliferation potential than the reprocessing method now used in several countries.

It's 24x7 baseline power.

It can be built anywhere there is water.

The power is very inexpensive (some estimates are as low as 2 cents/kWh to produce)

Safe from melt down because if something goes wrong, the reactor naturally shuts down rather than blows up.

And, of course, it emits no greenhouse gases.

What's wrong with that? Absolutely nothing...that is if you look at the facts and the science rather than the words.

Sadly, most people when they hear "nuclear reactor" or "breeder reactor" react negatively. "Not in my backyard," they say. But that's because of second generation nuclear

technology. When people say "no nuclear," they really are referring to "second generation nuclear." Everything about the IFR and fourth generation technology is completely different. The words with negative connotations are no longer negative. Yet we have this bad habit of remembering the bad associations. We have to overcome that. For example, one scientist told me, "Breeding, however, is a dirty word these days, so the GNEP emphasis is on burning the transuranics, instead of using them to assure an expanding source of clean energy into the indefinite future." So, in other words, we are doing stupid things because "breeding" is a dirty word. "Breeding" for the IFR is the nuclear equivalent of "recycling and re-using." That's a good thing, not a bad thing. And the safe word, "burning," is actually a bad thing. So the connotations are actually reversed.

We actually gave a group of our smartest scientists funding for 10 years and left them alone to come up with something brilliant so that it could be completed before we actually needed to deploy it. Talk about visionary, long-term thinking! Of course today things are different. Today, Congress is completely shortsighted. After gas is at \$4/gallon, they say we need to drill for more oil. Well if that is the solution, how come we didn't do that 10 years ago so we wouldn't have a crisis?

So here, in a rare instance of long term strategic investment and vision, our government did something really amazing in funding this project. And the scientists returned that trust by delivering on their promises. And then our government thanks them by pulling the plug on the project just before it was completed.

When Bill Clinton cancelled the funding in 1994, he said in his State of the Union speech that he did it because the project was unnecessary, not because it didn't meet any of its objectives. In his speech, he said, "We will terminate unnecessary programs in advanced reactor development."

He never asked the National Academy of Sciences to look into whether this project was unnecessary. Why not? Shouldn't you do a little objective research before you pull the plug on the biggest energy research project in history?

The Integral Fast Reactor (IFR) technology is arguably the single most important thing we can do to stop global warming. If it isn't the single most important thing, it's awfully close to the top.

So if this is so great, how come everyone isn't all over this technology?

Because nobody knew about it!

How can that be?

Because the DOE ordered the scientists working on the project not to talk about it.

Why would the government do that?

Why do you think the government would pour billions of dollars into the biggest energy research project in history and then not just cancel it, but do their best to bury it? The researchers at Argonne developed a safe and economical source of unlimited clean energy. Between that and the other renewable power technologies we wouldn't need oil, coal, gas or uranium mining/drilling anymore. We're talking about putting the most powerful corporations on the planet out of business. Not out of malice or spite, but simply because they won't be needed anymore and because what they're doing to the planet is killing us.

Some people think that the fossil fuel lobbyists could tell you why our government ordered the scientists not to talk about it. It's similar to the gag order (and edits to manuscripts and reports including IPCC reports) that the administration likes to put on scientists who try to talk about global warming. Jim

Hansen can tell you a few stories about that since he's experienced it first hand.

In fact, Hansen himself just found out about the IFR recently. Hansen is very informed. So if he didn't know about it, it's probably not well known. And that's what I found when I asked around.

According to this article that just appeared in the Seattle Post-Intelligencer, Bill Gates is investing in a project at Intellectual Ventures to "create a new type of nuclear reactor that would use fuels other than enriched uranium -- including spent fuel from existing reactors." The article quoted Myhrvold as saying " The idea is to create a nuclear reactor that is simpler and cheaper than current reactors, and generates clean power without waste or proliferation problems."

Well that's exactly what the IFR did. They knew about the IFR. It would be great if he could help it succeed or has ideas on how to make it even better.

GE has created a commercial plant design called the S-PRISM. GE is ready and willing to build a plant (a) to demonstrate the technical feasibility of a commercial-scale operation, and (b) to narrow the existing uncertainty in the final cost. They are not proposing, yet, to plunge into mass production of S-PRISMs. We can start building a reactor vessel for around \$50 million.

Apparently, Al Gore doesn't know about the IFR either. Check out this video where Senator Craig (a strong advocate of the IFR in 1994 but not really known for his advocacy of good science) chastises Gore for his role in cancelling advanced nuclear research in 1994. Gore doesn't know what Craig was talking about. More recently, people associated with the IFR tried to brief Gore, but they couldn't get past Gore's defensive linemen.

Cancelling the IFR was a huge mistake...One US Senator even commented how Congress will regret that decision. He said,

"I assure my colleagues someday our Nation will regret and reverse this shortsighted decision. But complete or not, the concept and the work done to prove it remain genius and a great contribution to the world."

"Through his work on the Integral Fast Reactor program, Dr. Till demonstrated that his technical solutions out paced the ability of the political process to appreciate them."

I couldn't have said that better. And Senator Kempthorne, who also isn't exactly known for his advocacy of science, is still waiting for his colleagues in Congress to regret and reverse their decision.

The good news is that DOE is trying to restart IFR with the GNEP (Global Nuclear Energy Partnership) initiative. The GNEP, if it is allowed to proceed, will involve a commercial demonstration that will establish the degree of economic competitiveness of the recycling process. General Electric thinks they can build an economically viable system and they already have a complete commercial design completed (S-PRISM).

But it looks as though Congress, in a classic case of throwing the baby out with the bath water, might decide to zero the funding of GNEP due to other aspects of the GNEP program.

Once again Congress shows how easily they seem to snatch defeat from the jaws of victory. The same Congress that brought you the Iraq war is now making sure that the best solution to the global warming never sees the light of day.

Hansen was blunt in his most recent trip report when he wrote "we should not have bailed out of research on fast reactors." Yet here we are doing it again. When are our politicians going to start listening to our scientists who are trying to solve the global warming problem?

Are there any other promising technologies that have no emissions and the potential to displace coal plants and can be sited anywhere? I don't know of any other than this.

But we should be looking at the ideas that are on the table now and funding the most promising 5 ideas with stable long-term funding (e.g., 10 years or more) that isn't subject to the capriciousness of Congress. That way, we'll have solutions available when we desperately need them instead of the normal short sighted approach we take which is to react to a crisis rather than take preventative steps. An energy crisis should never have occurred in the US. We should have been making huge investments in renewable research 10 to 20 years ago.

In this case we got lucky and did make the investment in electric power generation and the technology is available today when we need it. What a miracle.

Now we need another miracle: we need our government to restart the research at Argonne, we need the NRC to accelerate the approval of the plant designs, and we need to allow utilities to start building these plants. GE is ready and willing to build a demonstration plant.

California has a ban on new nuclear plants until the waste problem is solved. But building the IFR solves the waste problem. So I hope California will be a leader in incentivizing our utilities to start building these plants here. If California needs to change the law to do that, it should.

For around \$50M, we can build a reactor vessel to expedite certification and licensing by the NRC. That's a small price to pay to prove we have a silver bullet to solve the global warming problem. This is too good an opportunity to pass up.

I am not suggesting that the IFR is the be-all, end-all solution to the global warming problem. Some people believe other technologies (e.g., high-altitude wind, such as MakaniPower.com, solar thermal such as Ausra, the work MIT

is doing on solar electrolysis and fuel cells, or enhanced geothermal (EGS)) might be a silver bullet. Maybe. Maybe not. Most experts think you need a mix of good solutions just like we have a mix of ways to generate power today.

From a risk management point of view, you certainly want to cultivate and develop at least a small portfolio of silver bullets, i.e., "silver buckshot." After spending a lot of time talking to the people who built this technology, it's clear to me that the IFR deserves a place in that portfolio. The research at Argonne should be restarted now and someone should ask GE to build one; either a big utility or Congress should give DOE the money so they can have GE build a pilot S-PRISM test plant.

We are running out of time. If we do not start using breeder reactors, such as the IFR, this century, then it appears we will reach "peak nuclear" this century. If we use 4th generation breeder reactors such as the IFR (whose only disadvantage seems to be perception), we can extend the usable life of our nuclear resources to 1,000 years or more (see GamePlan, p. 126) with the IFR folks estimating over 50,000 years.

Also, it's not something we can decide to do later. If our objective is to get to 20% nuclear in our energy mix, that means we must build one 3GW plant per week for the next 25 years (see GamePlan, p. 149)!

So unless we are absolutely 100% sure we don't need nuclear, we should start very soon, or that option will be lost forever.

Mary Nichols, the highly respected chair of California's Air Resources Board has been convinced for years, and has said publicly, that nuclear would be needed and would make a comeback but only with breeder technology. While she has not yet been briefed in the IFR, she wants to learn more about it and a meeting has been set up.

A number of people who have read the above had additional insightful questions, such as "how do you respond to the disadvantages listed on the wikipedia page on the IFR?" or "if

this is so good, why doesn't GE have a customer for the S-PRISM?" or "how do you address the proliferation problem?" Those questions, and more, are answered here: The Integral Fast Reactor (IFR) project: Q&A.

Here are some more interesting facts:

Nuclear provides 70% of the carbon free electric power in the US even though we haven't started building a new nuclear plant in 30 years!

With the used fuel plus depleted uranium that's on hand, we can power the world for centuries before having to mine new uranium. With fast reactors and eventual mining, uranium is inexhaustible.

There's much more energy in the depleted uranium on hand than there is in the coal still in the ground.

Your typical coal plant emits well over 100 times more radioactive materials than a nuclear plant! See p. 89 of Blee's book for figures that will astound you.

Some 24,000 people die prematurely in the US from the effects of soot from coal plants (see p. 99). Annual health care costs due to soot, per year: \$167 billion dollars (see p. 100)!

Even if you add the 56 deaths from Chernobyl, far more people have been injured or killed from hydropower, oil, and gas (see p.99 of Blee's book).

With the investment of (nuclear) energy, carbon can be extracted from CO₂ and hydrogen from water, to make synthetic liquid fuel. No coal involved -- unless the CO₂ comes from existing coal-fired plants. Simplest, perhaps, is to make methanol (CH₃OH): $2\text{CO}_2 + 4\text{H}_2\text{O} + \text{energy} \rightarrow 2\text{CH}_3\text{OH} + 3\text{O}_2$. It is truly carbon-neutral, since the CO₂ emitted when the fuel is burned is only equal to what was used in the first place. This would make use of the existing distribution infrastructure while a better system (batteries or boron,

perhaps) evolves. While this has been known for several years, very few people seem to know about it. See <http://www.AmericanEnergyIndependence.com/nuclearenergy.aspx>.

Also, the Carbon Dioxide web page provides detail about recycling CO₂:
<http://www.americanenergyindependence.com/co2.aspx>.

See the section titled: CO₂ is valuable, don't waste it, recycle it! So this would solve our problem of how to eliminate CO₂ for transportation with complete compatibility with our existing infrastructure. Experts think it would take 15 to 20 years of work before this is viable, however. Here are two excellent videos:
http://uk.youtube.com/watch?v=_ST7oCLUCw4

("Syntrolysis" - Idaho National Laboratory) <
http://uk.youtube.com/watch?v=eot_JpsMIsw&feature=related
> (Northern Arizona State University)

We read about coal plant discharges all the time. The last time we heard about a nuclear discharge in the US was TMI. For example,

On December 22, one billion gallons of coal ash sludge and contaminated water, the waste product of coal-fired power plants of the Tennessee Valley Authority, broke through a containment area into the rivers of Kingston, Tennessee.

Last week a coal train operated by National Coal Corporation over turned spilling approximately 1100 tons of coal next to the New River in Scott County, Tennessee. Eight rail cars, which typically hold 120 tons of coal, were involved.

And now another spill occurred in Alabama at the Tennessee Valley Authority Widows Creek coal-fired plant, releasing up to 10,000 gallons of polluted sludge.

Nuclear operates without government subsidies

Toshiba is building a micro reactor that is 100 times smaller than a typical nuclear plant, at 6 feet by 20 feet. It produces 200 kilowatts of energy at about 5 cents per kilowatt hour — cheaper than coal-fired power in most places in the U.S. The Japanese company will begin marketing the reactors in the United States and Europe in 2009.

VCs are starting to invest in nuclear companies (see VCs have a nuclear reaction Technology, energy prices fire interest in new-era nukes).

There is a LOT of misinformation that is unfortunately being spread by seemingly credible sources. For example, here are some items to consider in response to an article that recently appeared in Scientific American:

-- The plutonium at WIPP is only "deadly" after a few thousand years if you go down there and live in close contact with it with it -- and maybe not even then.

The problems with fast reactors have been non-fundamental. Examples:

-- The Monju reactor was undamaged by the fire, and has been kept shut down for political reasons. I think it has been given the go-ahead to start up.

-- The EBR-II fast reactor worked flawlessly for many years.

-- The Phenix fast reactor in France has been on-line for decades.

-- The Superphenix reactor was shut down for political reasons, after it finally had its problems behind it and was working well.

-- The Russian BN-600 has been working well for decades

-- As you well know, the IFR technology has not yet been implemented. so Lyman's claim that "it never worked" is nonsense.

-- The fast-reactor waste would consist of 1 ton of fission products per GWe-year. True, "thousands of tons" if there were thousands of reactors. Easily dealt with -- harmless in less than 500 years (unlike coal waste).

Comments on the IFR from one of Australia's top climatologists.

It's not just noted climatologist Jim Hansen and noted British environmental author Mark Lynas who think that IFRs are critical to solving the climate crisis. Below are some comments I received from Barry Brook, of Australia's top climatologists.

Brook read Blee's book and wrote this review of Prescription for the Planet on his website:

This list of posts also include what will eventually be a 6-part review series of the book by Tom Blee, Prescription for the Planet, which, within its 400 pages, describes IFR and some related technologies (boron-powered vehicles and plasma burners for waste recycling) that together circumscribe the most practical and innovate energy and sustainability solution I have yet encountered. It also looks carefully at how to achieve the energy revolution required on an international scale. It is, in my opinion, the most important book ever written on energy and climate solutions.

That prompted Friends of the Earth Australia to write a critique of the IFR. Here is Brook's (and other's) response to the FOE critique of the IFR. Note that while Brook has several links to the FoE critique so that readers can see both sides of the issue, FoE doesn't reciprocate. FoE provides no links whatsoever to Brook's site. So much for FoE promoting an open, balanced discussion.

The other thing the critics lack is a viable alternative, but they really never focus on this. They'll talk about terrorism or proliferation risks or all the reasons why the IFR isn't a perfect solution. That's not the point. The point about climate change is we have to displace coal at a minimum. If not the IFR, then what? The critics never talk about that.

I wrote to Brook:

this is so infuriating since IFRs are FAR FAR better than existing nuclear plants and existing nuclear plants have an INCREDIBLE safety record...far safer than any other power source. Obama's new Secretary of Energy Steve Chu points out that existing nuke plants produce 70% of the GHG-free power in America....it is even more amazing when you consider the fact that we haven't started building a new nuclear plant for 30 years!

He wrote back (emphasis mine):

It is infuriating, I agree, because environmental groups seem to be willing to sacrifice great opportunities to fix fundamental problems, completely, because of historical (and even then, mostly ill founded) biases, ideologies and misinformation. My primary goal is about fixing the climate change problem. I was utterly depressed when I worked through the numbers on renewables and found they didn't stack up. But did I push that aside and pretend it was the solution anyway? No way! I got angry and felt without hope (until I found out about IFR). But I didn't lie to myself or others in the interim (I just implied there was little hope, when pushed...). That form of disingenuous debating is what must be stamped out here, and that is why rebuttals of 'propaganda' pieces like that from FoE (the most strident anties in Australia who helped kill discussion on the Gen III issue here a few years back) MUST be pursued.

Even Gen III+ like the ESBWR are incredibly safe. IFRs just do it even better (good old physical laws). Anyway, I'll get off my podium now.

Then I wrote:

In the FOE piece, they wrote:

Also ignoring the fact that 70-80+% of greenhouse emissions arise from sectors other than electricity generation - so Kirsch's claim that IFR's could be the "holy grail in the fight against global warming" is stupid.

but coal alone is responsible for 20% of global GHG emissions! See <http://www.pewclimate.org/global-warming-basics/coalfacts.cfm>

More importantly, that pew page also says: 68 percent of India's CO2 emissions are from coal

Yikes. The point is that if you can't get rid of coal, we're screwed.

To which he replied:

What he wrote is at best grossly disingenuous. You need to solve the electricity carbon problem to fix the vehicular fuels problem, space heating and embedded energy in building and manufactured goods, and Tom has a solution for MSW [municipal solid waste] also. About half of agricultural emissions can also be solved if you have a zero-carbon energy source. Then you just need to worry about the ruminant methane and carbon from deforestation. But the bottom line is, if you fix electricity, every else will fall into place.

As you said in an earlier doc, Steve, if we don't stop coal in places like China and India, we're hosed, irrespective of what we might do in the US and Oz (and even if we could do with without advanced nuclear, which quite clearly we can't:

<http://bravenewclimate.com/2008/12/21/renewable-energy-cannot-sustain-an-energy-intensive-society/>).

If you want more on why renewables cannot do the job, read over the comments section in these two posts:

<http://bravenewclimate.com/2009/01/16/put-all-energy-cards-on-the-table-to-fix-climate-change-fully/>

<http://bravenewclimate.com/2009/01/25/prescription-for-the-planet-part-iii-renewable-atoms-and-plasma-charged-waste/>

I also pointed out to him that when I ask the IFR critics in the US for their plan for how they propose to stop China and India from using coal, they don't have an answer and admit nuclear is the way to go. He asked the same question of the critics in Australia. Here's what he wrote:

I had a similar set of arguments with an anti-nuclear campaigner for the Australian Conservation Foundation recently – he started hammering me about proliferation risks, and so I asked him what his plan was for replacing the 484 GW of coal-fired power stations already installed in China, and the further 200 or so plants in the planning or construction pipeline. Like your critic, he had no answer.

Similarly a strong collection of climate action groups recently protested at the Australian Parliament House and came up with a manifesto on actions required to produce a zero-carbon Australia. But one of their 'non negotiables' was a ban on all nuclear power. So I pointed out to them that they're obviously not 100% committed to solving the climate problem fully after all [this was their ambit claim] – at least if it conflicts with other entrenched ideologies [as an alternative example, I'm not a vegetarian, but for scientific reasons I will no longer choose to eat beef or sheep if I have the option because of the climate-forcing effect of ruminant methane]. No answer.

There is a critique of IFR here: I plan to post a response on my blog, since the author Jim Green linked to it from a comment. Let me know if you have anything specific to say in response to it and I'll add it to the rejoinder I'm about to write [with acknowledgement).

Anyway, please do keep me in the loop – I've vitally interested in pushing this forward and am getting traction. My full list of articles on IFR is here:

<http://bravenewclimate.com/integral-fast-reactor-ifr-nuclear-power/>

Comments on Mark Lynas's website in debate between Greenpeace and Blees

Mark Lynas read Blees book, checked out the facts, and found out conventional "wisdom" about advanced nuclear was wrong. So he came out in favor of the IFR. He was quickly denounced by his peers (see Mark Lynas: the green heretic persecuted for his nuclear conversion). He offered Greenpeace a chance to respond on the Mark Lynas blog, and also published Blees' rebuttal to the Greenpeace comments. Here are some of the reader comments from Blees' rebuttal (since at that point readers could evaluate both sides):

Regardless of what Greenpeace states on environmental grounds, they are not independent and not objective. They have no reason to want nuclear power in any form even if they want to resolve AGW issues.

Thank you Tom for your article and also to Mark for posting it for us. A clear, concise and informative article which for me would seem to illustrate sensibly that nuclear power is not only viable in every way but also relatively safe. Additionally of course as Tom says we should explore and invest in renewables. What a great position it would be to not need nuclear power in the future, although like many I think we will need it. I will leave those better qualified to argue the science

here but Tom's points are well made. I await Greenpeace's response again with baited breath!

An eloquent and in-depth rebuttal, Mr. Bles. If only all solutions were as rock solid as this one...

Thank you Tom for you rebuttal. Nuclear is here for the foreseeable future and in some places growing. There are also no guarantees that renewables can replace fossil fuels within the uncertain timeframe, even with the desired demand side reduction. On this basis alone I'm convinced that it would be logical to invest in testing S-PRISM. It sounds a little too good to be true and may well be just another pipe dream. But again that's an argument for getting the testing done.

We seemed to be stuck in old school debate as usual; Mark Lynas and/or Tom Bles presents an optimistic picture, while Greenpeace presents the negative one. It kind of makes it difficult to take either side seriously. Most of us readers aren't educated enough to know which bit we should be throwing our pinch of salt on.

In the meantime, nuclear is becoming smaller and more affordable

Mini nuclear plants to power 20,000 homes

Toshiba Builds 100x Smaller Micro Nuclear Reactor

Summary of IFR benefits

energy security

global stability

environmental quality

anthropogenic global warming

nuclear waste

You can justify the investment on just the waste problem alone, but the IFR is far more important. Calculations from a number of respected sources indicates that renewables are insufficient to solve our energy problems. That leaves nuclear. Even NRDC admits that. But the best nuclear by far is the IFR because existing nuclear is not sustainable (we'll run out of

fuel unless we use breeder reactors like the IFR) and has higher costs and risks than IFRs. The IFR is simply a better nuclear design that is currently our best option as we move forward.

References on why renewables are insufficient to solve the climate crisis

Energy Secretary Chu, the President of MIT, and the renewable experts at the most recent Aspen Institute Energy Forum all agree that it is not responsible to believe that you can solve the climate crisis without nuclear. Here are a few more references.

<http://bravenewclimate.com/2008/12/21/renewable-energy-cannot-sustain-an-energy-intensive-society/>

<http://bravenewclimate.com/2009/03/18/the-solar-fraud/>

<http://bravenewclimate.com/2009/01/16/put-all-energy-cards-on-the-table-to-fix-climate-change-fully/>

<http://bravenewclimate.com/2009/04/11/climbing-mount-improbable/>

<http://bravenewclimate.com/2009/02/12/integral-fast-reactors-for-the-masses/>

Australia:

<http://www.theaustralian.news.com.au/story/0,25197,25817955-601,00.html>

MINING giant Rio Tinto has urged Kevin Rudd to immediately begin work on a regulatory regime allowing use of nuclear energy in Australia, arguing the viability of energy alternatives has been dramatically overstated. The company

has advised the government to consider "every option" for power generation because its pledges on reducing carbon emissions and using renewable energy will expose industry and consumers to huge increases in their power bills. And it says that overly optimistic assumptions on the viability of alternatives such as wind and geothermal power, as well as so-called clean coal technologies, have created a "false optimism" which the government must challenge by commissioning new research. Some regions of Australia will not be located near good renewable energy resources or sufficient geological storage formations for CCS," the submission says. In these circumstances nuclear energy may provide the optimum clear, reliable and affordable energy option."

UK: <http://www.withouthotair.com> is particular good. David MacKay examines five plans for the UK to move a pure renewable society. The conclusion is that renewables are not sufficient: "Any plan that doesn't make heavy use of nuclear power or "clean coal" has to make up the energy balance using renewable power bought in from other countries."

Japan: In particular, here's a description of Japan's quandry with respect to renewables:

<http://bravenewclimate.com/2009/07/19/we-need-a-real-global-plan-for-carbon-mitigation/>

Here's a statement from Japan's Federation of Electric Power (FEPC) companies on why renewables, while desirable, are not sufficient:

<http://www.japanuclear.com/nuclearpower/program/why.html>

says: Alternative energy sources such as solar and wind power are also attractive options in that they are clean and inexhaustible. And while their use will no doubt grow over the years, such resources remain hamstrung by a variety of drawbacks, from their susceptibility to the vagaries of weather and poor energy conversion rates to inferior cost efficiency. Continuous efforts will be made in research and development in order to utilize such alternative energy sources. However,

until the technological hurdles obstructing them - and there are many - are overcome, nuclear power remains among the most viable means of power generation.

Information on cost of nuclear reactors

See The New Economics of Nuclear Power by the WNA.

The dual CANDU-6 reactors at Qinshan were \$2.88 billion for 1.4GWe of power and was put into operation for grid transmission on November 19, 2002 in Haiyan, Zhejiang Province.

Cost of Nuclear Power: The IFR cost is estimated by GE to be about \$1,500 per kW. The first two ABWR's were commissioned in Japan in 1996 and 1997. These took just over 3 years to construct and were completed on budget. Their construction costs were around \$2000 per KW. The Chinese Nuclear Power Industry has won contracts to build new plants of their own design at capital costs reported to be \$1500 per KW and \$1300 per KW at sites in South-East and North-East China. If completed on budget these facilities will be formidable competitors to the Western Nuclear Power Industry. If the AP1000 lives up to its promises of \$1000 per KW construction cost and 3 year construction time, it will provide cheaper electricity than any other Fossil Fuel based generating facility, including Australian Coal power, even with no sequestration charges.

Here it is: Cost of 2 x Chinese CPR-1000 nuclear reactors cited as US\$3.8 billion - that's \$1,760/KW if they come in on budget: <http://tr.im/uPNR> . Contrast that with the \$8-10,000 often cited for building these in the USA. S

However, until there is competitive bidding on these reactors, it is admitted hard to assess the true cost.

In California, PG&E says that nuclear is the second cheapest power (the lowest cost is hydro but hydro isn't scalable). Diablo Canyon cost \$5.52B according to the New York Times for 2.2GW of power. They need \$1B every 20 years. The plant

will probably last 60 years. So over 60 years, that's \$7.5B invested to generate $2.2\text{GW} \times 24 \times 365 \times 60$ GW of power which is less than 1 cent per kWh (.89 cents actually). But some of that power is wasted because it can't be used. And the capacity factor of one reactor is >101% and the other is 88.2%. So that increases the cost per kWh. And Diablo was very expensive due to the protestors and a costly engineering (mirror image) mistake. Even with all that, you can see the power is VERY VERY cheap.

Today, modular reactors are much less expensive than Diablo Canyon. Using multiple small reactors at a site allows you to shut down a reactor if needed and still deliver plenty of power. They are also cheaper to produce (since they are produced in a factory like cars) and more reliable since these are mass manufactured rather than 1 off designs.

Worldwide, nuclear power is undergoing a renaissance. There are 45 so-called generation III reactors under construction, including 12 in China, and another 388 are planned or proposed.

Cost comparison of nuclear vs. coal account for all costs shows nuclear is comparable to coal today

An objective look at costs of various power generation technologies can be found in Table 2 which is energy cost data from the CEC.

One of the biggest problems with the American reactor program and why it stalled in the '70s and '80s, Three Mile Island notwithstanding, was that the costs were escalating. When it cost \$300 million to build a reactor in 1972 and it cost \$6 billion in the early '80s, something has gone terribly wrong. Part of that was the legal suits that extended the reactor certification time over to a period of decades. So part of it was the anti-nuclear movement that did that, but also a part of it was each design was different. So everything was built anew, new features were tried out, every design needed a special certificate to actually be built and then another

certificate to be run. So the whole system ultimately was set up to fail and things became more and more expensive.

If you can have a system where you have a standardized design with components that are built to a particular specification, if you can have components that are built in a factory and shipped to site rather than everything needed to be constructed on site, if you have modules where they're smaller such as they can be put on a rail car or on a large truck and taken to site and the many of these units put together to constitute a plant, then you can start to see that there's huge benefits in terms of efficiency, the fact that you don't need a standardized certificate for each and every new reactor, that there are economic benefits in building multiple units at a given factory. The places where this is happening is China and India right now. So although these have often been blamed as some of the worst carbon polluters, ultimately and ironically they could be the nations that lead us out of the carbon economy and into a low carbon economy based on nuclear power. AP-1000's made in China are expected to cost only around \$1,000 per kW (see AP-1000 Reactor being built in China - current summary and possible problems)..

From New Life for Nuclear Power
by ALVIN M. WEINBERG

Making a significant contribution to CO₂ control would require a roughly 10-fold increase in the world's nuclear capacity. If nuclear reactors receive normal maintenance, they will "never" wear out, and this will profoundly affect the economic performance of the reactors. Time annihilates capital costs. The economic Achilles' heel of nuclear energy has been its high capital cost. In this respect, nuclear energy resembles renewable energy sources such as wind turbines, hydroelectric facilities, and photovoltaic cells, which have high capital costs but low operating expenses. If a reactor lasts beyond its amortization time, the burden of debt falls drastically. Indeed, according to one estimate, fully amortized nuclear reactors with total electricity production costs

(operation and maintenance, fuel, and capital costs) below 2 cents per kilowatt hour are possible.

Electricity that inexpensive would make it economically feasible to power operations such as seawater desalinization, fulfilling a dream that was common in the early days of nuclear power.

<http://www.greencarcongress.com/2009/01/progress-energy.html>

says the 2 AP-1000s in florida will cost \$14B. That's pretty pricey compared with the \$1,000per KW claim (see <http://nuclearinfo.net/Nuclearpower/WebHomeCostOfNuclearPower>).

Yoon wrote:

What's been reported in Green Car Congress is misleading. Progress Energy Florida plans to build two nuclear units at their Levy County site. In the process of getting approval of the Florida Public Utility Commission, they submitted estimated project cost, which was very, very conservative -- I don't recall the numbers but they assumed high cost of money, high inflation rate, etc. And probably they doubled the capital costs that vendors were talking about. They wanted set the upper bounds so that they don't have come back to the PUC for revised cost estimates once the project was approved. As long as they carry out the project within the approved budget, they don't have to revisit the issue. The Green Car Congress assumed, based on the Florida numbers, \$9448/kW which leads to 20 cents/kwhr at 14.57% fixed charge rate and O&M cost (including 2 cents/kwhr fuel cycle cost) of 8 cents/kwhr. The capital cost is probably a factor of 4 or so high and also the same for O&M. Today's total generating cost is less than 2 cents/kwhr and the fuel cycle cost is 0.55 cents/kwhr.

Progress Energy Florida has not signed a construction contract yet, so we don't know what the project cost will be. In fact, all 16 utilities who filed NRC license applications for 26 reactors have not signed contracts yet. Maybe the only exception might be NRG who is building ABWR in Texas. The capital costs for the next series of LWRs remain illusive. The estimate of \$1000/kW for AP-1000 is probably too optimistic (with initial cost of \$3500/kW in the U.S. About 60% of the reactors built in the last two decades or so probably is in the Southeast Asia. Typical costs there have been \$2000-2500/kWe with construction period of less than four years. It behooves me why we cannot do the same in this country. Different labor rates or commodities costs do not explain it. I am concerned with the experience of the new Olkiluoto plant in Finland based on AREVA's 1600 MWe EPR. The project was to be completed this year, but the original fixed price cost has escalated by 50% with 3.5 years delay. I hope this is not a sign that will be repeated here again.

Barry wrote:

Steve, I wouldn't take that Florida price at face value. After all, there was the \$26B figure coming out of Ontario recently (AECL and AREVA both came up with similar bids), and it took a bit of digging for me to find out what was behind that 'blowout'. Turns out the LCOE was a mere 5c/kWh: <http://wp.me/piCIJ-qx>

I disagree with Ralph from NRDC in his confidence that regulatory ratcheting is a thing of the past (RR was, in my reading of history, the primary thing that killed NP construction in the US) -- there is nothing enshrined in law to guarantee that, which is one thing that makes the utilities nervous, I suspect.

Dan wrote:

Yoon et al: Similar experience here in Ontario. The RFP asked the vendor to assume 100% of the risk with massive

contingencies, full risk coverage for the whole life of the plant, etc., etc. I was surprised that the AECL and AREVA bids came in as low as they did.

The Ontario government behaved as if they were making every attempt to create an unbearable contract price. The anti-nukes were (and are) very happy.

Bottom line: Keep a close watch on the AP-1000 and ESBWR. In less than 4 years the first AP1000s should be coming on line in China. Additionally, the Chinese themselves have learned extensively from both S. Korea and Japan that have bought in reactors ahead of schedule and under or at budget. So it's not entirely new territory we're talking about.

Nuclear cost vs. solar

To compare with solar, for \$50K, you can buy a solar rooftop system that has 8MWh annual output. So if you assume the annual output is actually completely steady 24x7, then that is producing an average of 913watts. So you spent \$54,000 for a continuous KW of energy production capacity. So rooftop solar is 36 times more expensive than nuclear per watt installed (assuming nuclear at \$1,500 per kW which is the GE IFR estimate which is below the \$2,000 actual cost for the first two ABWRs in japan).

If the solar system works the same for 25 years, the cost per kwh of the power is $\$50,000/200,000 = .25$ per kwh. That's assuming no cost of capital for the \$50K investment! So if you are an energy hog and you are getting hit paying 44 cents for a lot of your power, then solar panels actually can make sense. But in general, there are much more efficient ways to get the power than rooftop solar (see <http://shearerinsanity.blogspot.com/2009/03/rooftop-solar.html>).

There was a study of the real costs PV systems done in the UK that found results very similar to my calculation. They looked at a number of systems and the cheapest was slightly more than 20 pence per kWh assuming a 25 lifetime. That's 33

cents/kWh which is not far from my number. They also looked at the payback time compared to grid power and found that the most efficient installation would have to run for at least 45 years to make it a better deal than grid power. And the worst installation would have to run for 296 years before it would be a better deal than grid power. In short, all of the systems are a dumb investment; you never get your money back.

I see many others discovered the same thing. For example, see *The economics and usefulness of domestic rooftop solar PV installations*.

Nuclear lasts about 60 years compared to PV solar that lasts 25 years.

So it's actually 86 times cheaper to install nuclear capacity (not quite as much since you have to pay people to run your nuclear plant). Also, the nuclear capacity works 24x7. To utilize that 913W you would have to have a large, expensive and relatively short-lived (perhaps 10 years) battery to store energy when produced in excess, and to deliver power on demand when the sun isn't shining. So the system cost will be substantially higher than the figure I calculated. Or, you can use the grid for that storage/backup purpose -- but if everyone did that, well, it just wouldn't work, for obvious reasons, so grid backup cannot be part of a large-scale PV energy solution.

Lang's *Solar Realities* paper (see *Solar power realities – supply-demand, storage and costs*) came to a similar conclusion about PV solar:

By looking at the limit position, the paper highlights the very high costs imposed by mandating and subsidising solar power. The minimum power output, not the peak or average, is the main factor governing solar power's economic viability. The capital cost would be 25 times more than nuclear power. The least-cost solar option would require 400 times more land area and emit 20 times more CO₂ than nuclear power.

Conclusions: PV solar power is uneconomic. Government mandates and subsidies hide the true cost of renewable energy but these additional costs must be carried by others

Nuclear Safety

If you live next door to a nuclear reactor, there are a number of radiological studies done on a hypothetical person called Fencepost Man who's supposed to have his house on the fencepost on the boundary of a nuclear power site. He would get approximately one millirem of radiation more than the general public, and that might sound like a lot but in fact the general public gets over 300 millirems of radiation each year just from natural sources. So essentially there's no difference between living next door to a nuclear power plant and living in most other places in the world. And indeed, if you live on top of a granite intrusion you'd get about twice that. So people tend to be a bit irrational about radiation and we need to have a bit of an education campaign about that too.

Nuclear is one of the lowest risk forms of energy on a kWh basis

In the entire 50 year history of commercial nuclear in the United States, it is estimated that one person might have died. That was due to radiation release in the Three Mile Island accident (more below).

Modern reactors are designed on the principle of being inherently safe, and what that means is they have a number of design principles that are based on the laws of physics. So in order for them to melt down or explode there would have to be an extraordinary set of circumstances where you would have multiple systems failing, and in the new reactors that are being proposed, even more than that, you would have to have the laws of physics being violated, which of course is not particularly likely.

Design safety of modern day reactors are orders of magnitude better than original nuclear plants.

A Reactor Safety Study (RSS) was conducted in 1975 by Norman Rasmussen of MIT under NRC sponsorship. This probabilistic risk assessment (PRA) study was also known as the Rasmussen report and WASH-1400. The RSS estimated that at the time (mid 70s) a reactor meltdown may be expected about once every 20,000 years of reactor operation; that is, if there were 100 reactors, there would be a meltdown once in 200 years. Three Mile Island (TMI) was NOT a full meltdown -- only partial, and it was still a watershed regarding changing safety systems and training (and the fateful regulatory ratcheting, but that's another story). There have been 400 water-moderated commercial reactors running for 30 years. That's 12,000 reactor years, with one partial meltdown (so far) -- entirely consistent with the prediction of an average of one meltdown every 20,000 years. And nobody was hurt. (Chernobyl doesn't count -- not water-moderated & not analyzed.)

<http://www.phyast.pitt.edu/~blc/book/chapter6.html>
notes the following:

The authors of the two principal reports on the Three Mile Island accident^{1, 2} agree that even if there had been a complete meltdown in that reactor, there very probably would have been essentially no harm to human health and no environmental damage. I know of no technical reports that have claimed otherwise. Moreover, all scientific studies agree that in the great majority of meltdown accidents there would be no detectable effects on human health, immediately or in later years. According to the government estimate, a meltdown would have to occur every week or so somewhere in the United States before nuclear power would be as dangerous as coal burning.

A thorough risk assessment was done on the GE-Hitachi ESBWR and found that a Three Mile Island style meltdown accident could occur once every 29 million reactor years. As you can see, a PRA puts the ESBWR about 3 orders of magnitude safer than the Gen II designs of the 1960s (and these have all been improved with later modifications).

Today's LWRs (i.e., those currently being built) incorporate safety features that are far beyond our current reactors (most of which were built 30 years ago) by orders of magnitude. Newer fourth generation reactors are even better since they rely on passive safety guaranteed by the laws of physics. They tested this to prove it would work: they disabled all the safety systems on the EBR-II reactor and all the alarms went off, but the reactor just shut down on its own with no release of radiation.

Chernobyl was a special type of reactor built by the Russians to breed plutonium for bombs, so it had a graphite core and it meant that if you had problems in the reactor where the water flow would stop, it would actually run out of control. No American reactor can actually do that. And Chernobyl also lacked a containment building, which was another problem because when it started a graphite fire all of the radioactive material was dispersed into the air, another disaster. That also can't happen in an American reactor. The Chernobyl nuclear reactor design would never have been approved in the US for a civilian power plant. Chernobyl was a RBMK type power plant. There are only a handful of these in the US and all of them are used for military purposes. There are no civilian RBMK power plants in the US generating commercial electricity. RBMK are considered unsafe for civilian use by the US Government. Only socialists use technology like that in populated areas. Current [obsolete] technology US Commercial Nuclear Power Plants are mostly Pressurized Water Reactors. TMI was one of these. Boiling Water Reactors comprise the rest.

http://www.eia.doe.gov/cneaf/nuclear/page/at_a_glance/reactors/dresden.html

These water reactors cannot have the kind of accident Chernobyl had. It is not physically possible.

Secondly, the operators allowed the scientists to experiment on the reactor and disable many of the safety systems. That's

why it's important for the US to take a lead in having other countries adopt our designs rather than build their own. If we bury our head in the sand and pretend nuclear will go away, we are making a huge mistake. We should be taking a leadership role in reactor design and operator training, worldwide.

As far as Three Mile Island, the reactor was damaged but nobody was killed or injured from the radiation. Three Mile Island was a lesson where there was poor training of staff and a failed system for notifying the staff of actually what was happening. And so they made mistakes such as opening valves when they should have been shutting them and letting water in when they shouldn't have. But Three Mile Island didn't hurt anyone. There were no fatalities, there was no radioactivity of any note released into the environment. So even in that worst-case scenario for an American reactor there were essentially no problems. But of course the reactor was destroyed, it cost millions of dollars, and it set back the American nuclear program by decades really because of the effect on public opinion. That's gradually changed. The accident resulted in improved operator training and the creation of more safety systems. According to the Report of the President's Commission on The Accident At Three Mile Island (the Kemeny Commission Report): "Just how serious was the accident? Based on our investigation of the health effects of the accident, we conclude that in spite of serious damage to the plant, most of the radiation was contained and the actual release will have a negligible effect on the physical health of individuals. The major health effect of the accident was found to be mental stress.... It is entirely possible that not a single extra cancer death will result. And for all our estimates, it is practically certain that the additional number of cancer deaths will be less than 10."

A study done 20 years after the Three Mile Island accident confirmed that the impacts were not significant:

Based on residential proximity and travel into and out of a 5-mile area during the 10 days after the accident, scientists

estimated maximum and likely whole-body gamma exposures for each individual. The estimated average likely and maximum gamma doses were 0.09 mSv or 9 mrem and 0.25 mSv or 25 mrem, respectively. The range of likely gamma exposure was estimated to be 1-170 mrem. The average annual effective dose from natural background radiation in the United States is estimated to be approximately 3 mSv (300 mrem) [Committee on the Biological Effects of Ionizing Radiation (BEIR V) 1990]. These exposures were therefore considered minimal.

....

In conclusion, the mortality surveillance of this cohort, with a total of almost 20 years of follow-up, provides no consistent evidence that radioactivity released during the TMI accident (estimated maximum and likely gamma exposure) has had a significant impact on the mortality experience of this cohort through 1998.

Three Mile Island: cancer risk ambiguous said:

A court-ordered study finds no "convincing evidence" of increased cancer risk among people exposed to radiation from the Three Mile Island nuclear power plant.

The findings are "consistent with all the medical and scientific evidence we have so far," says physicist Jacob I. Fabrikant of the University of California, Berkeley. The University of California, Berkeley is a public research university located in Berkeley, California, United States. Commonly referred to as UC Berkeley, Berkeley and Cal, who served on the staff of the 1979 presidential commission that investigated the accident. That panel concluded that the amount of radiation released during the mishap was a fraction of the region's normal annual background radiation from cosmic and geologic sources, and it predicted a maximum of one excess cancer death from the accident.

Also, nuclear is one of the safest forms of power generation and much much safer than coal that it would replace. Per http://en.wikipedia.org/wiki/Nuclear_power_in_the_United_States:

To compare the historical safety record of civilian nuclear energy with the historical record of other forms of electrical generation, Ball, Roberts, and Simpson, the IAEA, and the Paul Scherrer Institut found in separate studies that during the period from 1970 - 1992, there were just 39 on-the-job deaths of nuclear power plant workers, while during the same time period, there were 6,400 on-the-job deaths of coal power plant workers, 1,200 on-the-job deaths of natural gas power plant workers and members of the general public caused by natural gas power plants, and 4,000 deaths of members of the general public caused by hydroelectric power plants.[3][4][5] In particular, coal power plants are estimated to kill 24,000 Americans per year, due to lung disease[6] as well as causing 40,000 heart attacks per year[7] in the United States. According to esteemed journal Scientific American, the average coal power plant emits more than 100 times as much radiation per year than a comparatively sized nuclear power plant does, in the form of toxic coal waste known as fly ash.[8]

Current Gen III LWRs ARE inherently safe – the AP1000, for instance, uses a range of systems based on the laws of physics (in addition to engineered interventions), such as gravity-induced convection in the containment dome and emergency cooling takes that are forced by pressurised nitrogen and reliant on heat-based recirculation – that’s why it’s called the “Advanced Passive 1000”. It’s just the IFR does it more efficiently thanks to the properties of liquid metal coolants and metal fuels.

Nuclear waste

here's a reference from wikipedia page on nuclear_power:

Overall, nuclear power produces far less waste material than fossil-fuel based power plants. Coal-burning plants are particularly noted for producing large amounts of toxic and mildly radioactive ash due to concentrating naturally

occurring metals and radioactive material from the coal. Contrary to popular belief, coal power actually results in more radioactive waste being released into the environment than nuclear power. The population effective dose equivalent from radiation from coal plants is 100 times as much as nuclear plants.[74]

The waste of LWR is actually incredibly safe compared to other energy technologies – about 5000 times safer than coal, for instance, based on a standard Loss of Life Expectancy (LLE) risk assessment (NOT counting climate-related damage). This is a great read: <http://www.phyast.pitt.edu/~blc/book/chapter11.html>

But of course if you only have to deal with fission products and can recycle and use all the TRUs (which is true when using an IFR), the story is even better!

Worker safety

Remarkably, it is safer to work at a nuclear power plant than in the manufacturing sector and even the real estate and financial sectors.

The nuclear industry in the United States has maintained one of the best industrial safety records in the world with respect to all kinds of accidents. For 2008, the industry hit a new low of 0.13 industrial accidents per 200,000 worker-hours.[28] This is improved over 0.24 in 2005, which was still a factor of 14.6 less than the 3.5 number for all manufacturing industries.[29] Private industry has an accident rate of 1.3 per 200,000 worker hours.[30]

Uranium supply

See Once-through, using uranium from the oceans

http://www.inference.phy.cam.ac.uk/withouthotair/c24/page_163.shtml

Insurance

Some anti-nuke people say nobody will insure nuclear plants. Here's the response from Rod Adams:

All nuclear plants in the US carry a required \$300 million in private insurance and sign up to be part of a group insurance policy where all of the members are the owners of all of the other reactors in the country. If there is a claim against a nuclear facility that exceeds their private insurance, the members of the group kick in as much as \$98 million each for a total pool of \$10 Billion.

The only claims ever paid out in relationship to this system have been well below the private insurance limit. The pool has never kicked in and no taxpayer funds have ever been expended.

Compare that to the airline industry and the payouts that the government had to make back in 2001.

CO2 emissions

Life cycle CO2 emissions for nuclear power are lower than wind or solar (from <http://www.japannuclear.com/>)

On the carbon front, there is some CO2 emissions during the construction and as a result of fuel enrichment. The CO2 outputs of a nuclear plant are very, VERY low on a per kWh basis compared with other sources. It actually beats out wind and solar! - it is a little worse than hydro, since hydro has no fuel CO2 emissions over its lifecycle.

<http://www.world-nuclear.org/info/inf100.html>

The "it produces plutonium argument"

See <http://bravenewclimate.com/2009/09/07/is-our-future-nuclear/>

where the anti nuclear guy says fourth generation breeder reactors produce plutonium. Heck, every nuclear reactor produces plutonium. But the IFRs consume the plutonium and the IFR's don't require enrichment. Those are 2 key points. I particular enjoyed this comment:

It is like saying car engine factories produce engine blocks and this maximizes the risk of guns.

To work in that context, there would have to be a single word for any round channel in which expanding combustion gases propel a slider. He's counting on the single word "plutonium" to mean two different things, without his audience knowing that it means two different things (a fallacy of equivocation).

I doubt Noonan expects any country or group to get nuclear weapons because it has power reactors. None ever has. Power reactors, if fed ^{238}U , make power reactor plutonium. Much cooler, smaller, simpler, cheaper reactors make weapon-grade plutonium, as different from the other kind as is a gun barrel from an Ecotec engine block.

The theoretical usability of the engine block as a multibarrel cannon represents a very long way around to a very inferior result, weapon-wise. Using power reactor plutonium for weapons is similarly believed to be a long way around to an inferior result, and so has apparently never been tried.

(When the American gas industry's Hazel O'Leary was in public office, her government published a claim to this effect, but acknowledged that the yield of the bomb that was produced may have been zero, and did not acknowledge that the supposedly power-reactor-derived plutonium was quite unlike any being made today. More at Jeremy Whitlock's "Canadian Nuclear FAQ".)

The terrorist attack scenario argument

The WWF position paper on nuclear energy which is included in Climate Solutions - WWF's Vision for 2050 references a UCS study Impacts of a Terrorist Attack at Indian Point Nuclear Power Plant which says a properly done terrorist attack could result in 44,000 short term deaths and eventually kill 518,000 people from cancer. The economic damages within 100 miles would exceed \$1.1 trillion for the 95th percentile case, and could be as great as \$2.1 trillion for the

worst case evaluated, based on Environmental Protection Agency guidance for population relocation and cleanup. Millions of people would require permanent relocation.

To put that in perspective, 9/11 is estimated to have cause nearly \$2 trillion in damage.

So WWF could have written a paper saying we shouldn't have buildings and airplanes because under a worst case scenario, they can combine to cause \$2 trillion in damage and thousands of deaths.

And Greenpeace would argue that we shouldn't have any chemical plants at all since 15,000 are a ripe target for sabotage. They argue that a study by the Army surgeon general, conducted soon after 9/11, found that up to 2.4 million people could be killed or wounded by a terrorist attack on a single chemical plant. So chemical plants are far more dangerous than our worst case nuclear attack. Should we now shut down all chemical plants?

The problem with the WWF scenario is that they never tell you what the likelihood of such an event happening really is.

Studies have been done to show that containment buildings would withstand the impact of a fully fueled jet aircraft. This scenario involves essentially a hollow tube of aluminium and steel, holding a few hundred thousand litres of gasoline, colliding with a heavily reinforced concrete dome designed to contain extreme internal steam pressure. Some relevant comments re: that particular Indian Point scenario are here: <http://nextbigfuture.com/2008/08/indian-point-worst-case-nuclear.html>

The \$2 trillion figure, even if you accept their assumptions (which are highly disputable), is the 99.9th percentile. That is, this cost would be incurred once in every 1,000 plane hits to a reactor like nuclear point. Of course if you bury an IFR, the risk is virtually zero. This is an example of disingenuous people

taking advantage of the general populace's gross ignorance on the matter of risk and probability.

There is a good discussion of this general by Bernard Cohen: <http://www.phyast.pitt.edu/~blc/book/chapter7.html>

I like this quote:

"It is very difficult to predict the future of scientific developments, and few would even dare to make predictions extending beyond the next 50 years. However, based on everything we know now, one can make a strong case for the thesis that nuclear fission reactors will be providing a large fraction of our energy needs for the next million years. If that should come to pass, a history of energy production written at that remote date may well record that the worst reactor accident of all time occurred at Chernobyl, USSR, in April of 1986."

...and think this section is useful: <http://www.phyast.pitt.edu/~blc/book/chapter6.html> Truly, the possibilities are limited only by ones imagination, and as the previous WWF treatment of nuclear emissions showed, the imaginations of those folks runs way, way into fantasy land.

The Worst Possible Accident

One subject we have not discussed here is the "worst possible nuclear accident," because there is no such thing. In any field of endeavor, it is easy to concoct a possible accident scenario that is worse than anything that has been previously proposed, although it will be of lower probability. One can imagine a gasoline spill causing a fire that would wipe out a whole city, killing most of its inhabitants. It might require a lot of improbable circumstances combining together, like water lines being frozen to prevent effective fire fighting, a traffic jam aggravated by street construction or traffic accidents limiting access to fire fighters, some substandard gas lines which the heat from the fire caused to leak, a high wind

frequently shifting to spread the fire in all directions, a strong atmospheric temperature inversion after the whole city has become engulfed in flame to keep the smoke close to the ground, a lot of bridges and tunnels closed for various reasons, eliminating escape routes, some errors in advising the public, and so forth. Each of these situations is improbable, so a combination of many of them occurring in sequence is highly improbable, but it is certainly not impossible.

If anyone thinks that is the worst possible consequence of a gasoline spill, consider the possibility of the fire being spread by glowing embers to other cities which were left without protection because their firefighters were off assisting the first city; or of a disease epidemic spawned by unsanitary conditions left by the conflagration spreading over the country; or of communications foul-ups and misunderstandings caused by the fire leading to an exchange of nuclear weapon strikes. There is virtually no limit to the damage that is possible from a gasoline spill. But as the damage envisioned increases, the number of improbable circumstances required increases, so the probability for the eventuality becomes smaller and smaller. There is no such thing as the "worst possible accident," and any consideration of what terrible accidents are possible without simultaneously considering their low probability is a ridiculous exercise that can lead to completely deceptive conclusions.

The same reasoning applies to nuclear reactor accidents. Situations causing any number of deaths are possible, but the greater the consequences, the lower is the probability. The worst accident the RSS considered would cause about 50,000 deaths, with a probability of one occurrence in a billion years of reactor operation. A person's risk of being a victim of such an accident is 20,000 times less than the risk of being killed by lightning, and 1,000 times less than the risk of death from an airplane crashing into his or her house.⁷

But this once-in-a-billion-year accident is practically the only nuclear reactor accident ever discussed in the media. When it

is discussed, its probability is hardly ever mentioned, and many people, including Helen Caldicott, who wrote a book on the subject, imply that it's the consequence of an average meltdown rather than of 1 out of 100,000 meltdowns. I have frequently been told that the probability doesn't matter — the very fact that such an accident is possible makes nuclear power unacceptable. According to that way of thinking, we have shown that the use of gasoline is not acceptable, and almost any human activity can similarly be shown to be unacceptable. If probability didn't matter, we would all die tomorrow from any one of thousands of dangers we live with constantly.

The "nuclear reprocessing is dangerous even if you use pyroprocessing" argument.

UCS in their paper "Nuclear Power in a Warming World" claims pyroprocessing is just as dangerous as PUREX. They wrote:

According to a report from a 1999 workshop at the DOE's Lawrence Livermore National Laboratory (LLNL), the transuranic elements or other actinides in spent fuel could be used to build nuclear weapons:

Examination of various cycles and the opinions of weapons-design experts lead to the conclusion that there is no 'proliferation-proof' nuclear power cycle. Explosive Fissionable Material (EFM) includes most of the actinides and their oxides.¹⁶⁸

Dr. Bruce Goodwin of LLNL also maintained at the workshop that "as nuclear weapons design and engineering expertise combined with sufficient technical capability become more common in the world, it becomes possible to make nuclear weapons out of an increasing number of technically challenging explosive fissionable materials."¹⁶⁹

In other words, it is unwarranted to assume that terrorists could not acquire the ability to build nuclear weapons with the

mixture of plutonium and other actinides produced by UREX+.

A number of articles about making bombs from reprocessed material are available at

<http://www.gemarsh.com/archives/category/nuclear-policy/>

scroll down to articles published in Physics & Society. The one titled Purex and Pyro refers to a LLL briefing that makes it clear that pyroprocessed fuel (Note that UCS concentrates on UREX+) is essentially useless for bombs.

Here are a few excerpts:

In his 1993 paper, J. Carson Mark wrote: “The difficulties of developing an effective design of the most straightforward type are not appreciably greater with reactor-grade plutonium than those that have to be met for the use of weapons-grade plutonium.”[4]

That was based on his calculations, and on his apparent opinion that the heat problem is trivial. However, to our knowledge no weapons program, anywhere, ever, has made another attempt to produce an explosion with reactor-grade plutonium. It is extremely likely that the 1962 test demonstrated that reactor grade plutonium is lousy material for making bombs, and that no nation, given the data from that test, would want to use the stuff.

While the difference in weapons potential is one of degree rather than principle, that difference is huge. The point is not that it can't be done, but rather that a would-be proliferator has far easier routes to nuclear weapons.

By the way, it has sometimes been asserted that the chemically impure plutonium produced by the pyrometallurgical process could be used to make a bomb without further separation. This has been convincingly refuted in an unpublished

investigation by Livermore National Laboratory (1994), which concluded that the transuranic impurities render the material far too hot (thermally and radioactively), and with far too many spontaneous neutrons, to make it at all feasible.

Anyway, it is very much easier to make a bomb with highly enriched uranium than with reactor grade plutonium. That route would surely be taken by any organization that did not have access to weapons-grade plutonium.

But making a bomb from highly enriched uranium is very very hard. And you'd still have to purify it to have any chance of success, and then make a reliable weapon out of it. And if you know how to do all that, then getting the material is going to be the least of your problems.

There are two scenarios here: either you think the terrorists are dumb or they are really smart. If they are dumb, they'll fail. If they are really smart, they'll know that the only way to realistically have any chance of making a bomb is to partner with a country like North Korea which already has the bombs. The scenario where they steal material, purify it, and build a bomb from scratch is unrealistic. Even highly organized countries with huge financial and scientific resources have a tough time making nuclear weapons. The easiest route for any terrorist is to partner with a rogue state who hates the United States and has nuclear weapons. The hardest route is to use the reactor waste product or pyroprocessed output. If you can do it with that, then eliminating pyroprocessing really isn't going to be much of a hurdle.

In any case, the IFR certainly isn't going to make a terrorist's task any easier than it is now.

The "nuclear gets huge subsidies" argument.

I'd done a similar number crunch in response to an argument by a commenter on my website about nuclear power being heavily subsidised. Here is my reply, and a good follow-on comment by another guy who works for a CA utility:

Many people are concerned that nuclear has received the lion's share of government funds. In the US (for which I have figures), Federal DOE energy subsidies for solar+wind amounted to \$0.026/kWh of electricity generated.

Nuclear power received \$0.00038/kWh of electricity generated. That is, 'technosolar' got 68 times more funds per unit generation than nuclear. Of course this is only direct subsidy — it does not include tax credits, subsidies by power companies that must maintain spinning reserve for times when wind is weak, or subsidies by customers who regularly pay a few cents per kWh for Green Power. Wind in the US has also received a production credit (subtracted from taxes, not income) of 1.8 c/kWh.

In the UK, between 1990-2005, total government allocations to renewables R&D (including research council projects but leaving out fuel cells & embedded generation) was about £180m while nuclear fission & fusion got about £370m- more than double.

My numbers quoted for the US were subsidies for different generation sources per kWh. Using the 2004 UK electricity figures, non-hydro renewables produced 13.6 TWh of electricity and nuclear produced 73.7 TWh. Taking these as average figures over the 1990-2005 period of 16 years, that amounts to £0.00083/kWh for renewables and £0.000314/kWh for nuclear — so on that basis, renewables gets 2.6 times more funds than nuclear. This is actually a little unfair on nuclear, as over the period it has produced a lot more energy, on average, than non-hydro renewables, which were close to nothing in 1990 (whereas nuclear was 58 TWh).

Further, the <<http://aia.org.au/Content/Lenzenreport.aspx>

> new ISA analysis by Manfred Lenzen backs up the above — it puts subsidies for nuclear power as lower than any other energy technology, based on the 2007-2009 literature.

Critique's reply:

I guess that would be true if you only counted direct subsidies however you must acknowledge the indirect subsidies over the 60 or so years that nuclear power has been around as well as the technology transfer from military applications.

It would be very difficult to exactly pin down the total amount of money spent on nuclear however if you prefer the direct DOE figure then go ahead and quote this one.

David Walter's response:

Setting aside for a second the 'indirect subsidies' nuclear has received, the main point is that wind and solar really wouldn't even run, at all, without these huge subsidies per kWhr they get. Period. They wouldn't pay for the maintenance and staffing on existing plant and material. This isn't true due to the massive revenue flow nuclear gets. Nuclear would keep on going, *everywhere*, basically.

Now...the indirect subsidies. Yes, these are "historical" subsidies, 94% (approx) received *prior* to 1974. In fact, it's very hard to parse out.

Some were in fact *direct* and not "indirect". But most it was as a result of the Navy and Army nuclear program which the civilian side was a spin off.

The first civilian plant at Shippingport was a former Navy nuclear reactor where they ran a variety fuels — including thorium — for R&D (all the while pumping out MWs).

But how long does one 'hold this 'against' nuclear? Really. The subsidy was paid. Now, ever KW of power produced slowly reduces the % of that subsidy to the overall 'cost' of a nuclear KW, doesn't it? Should we NOT use nuclear because it had massive subsidies, most of which was for military nuclear propulsion programs?

Today, nuclear in my opinion is important enough TO subsidize. I'm all for it. It's a proven carbon mitigator. The subsidies have been more than worth it. The US gov't should set aside about 10 billion USD *specifically* to deploy a variety of Generation IV reactors and get it over with.

From George Stanford:

All:

Our gov't is subsidizing "renewables" to the tune of \$30 Billion (thanks to Jan van Erp for flagging the story). See <<http://snipurl.com/osy18>>.

Now let's do a little figgerin'. "This administration has set a goal of doubling renewable electricity generation over the next three years," Energy Secretary Steven Chu said in a statement." That can't include hydro, so the "renewable" fraction would go up to 4.8% (see figure below), adding to the grid 2.4% of its present capacity of 1,000,000 MWe, or 24,000 MWe. But that's nameplate capacity, and actual capacity is perhaps 30% of that, so the additional real capacity is more like 7,200 MWe.

Thus the subsidy per kWe of real added capacity would be $\$30\text{B} / (7,200,000 \text{ kWe}) = \$4\text{k} / \text{kWe}$, or $\$4\text{B} / \text{GWe}$. That, dear friends, is roughly the total cost of building a new nuclear plant, according to some estimates (not the lowest).

It would be legitimate to observe that the \$30B includes something for transmission lines. It also would be legitimate to point out that most of that new transmission capacity would not be needed if the same new power came from nuclear plants near regions of high population density, instead of from the remote areas where the wind blows and the sun shines.

Important: This subsidy is not seed money to bring a new technology up to economic competitiveness, which would be a proper use of public funds. It's largely for construction, with

known technology -- and it will only partially cover the construction costs, at that.

Let's not hear any more comments about excessive subsidies for nuclear power.

The Von Hippel arguments

From Robert Hargraves (posted to LA Times site):

Von Hippel's article is partly right but incomplete. Yes, spent fuel can be safely stored in dry casks for decades; there is no reason to panic. Yes, France's pioneering reprocessing is not good enough. It separates the uranium and plutonium, leaving low volume radioactive waste to store, but leaves France with excess uranium and plutonium. He is wrong about the US "we don't reprocess, you don't need to either" success. Banning US reprocessing didn't stop India, China, Pakistan, Israel, South Africa, and North Korea from making nuclear weapons, and it has not impeded Iran. France, UK, India, Japan, and Russia reprocess spent fuel. Spent nuclear fuel still contains 97% of its original potential energy. Technologies such as the integral fast reactor allow spent fuel to be "deep burned" to generate electric power. The integral fast reactor can also consume the much greater, fallow stocks of depleted uranium created by uranium enrichment plants that manufacture today's US nuclear reactor fuel. Even more energy can be harvested from more plentiful thorium using the liquid fluoride thorium reactor. There is enough carbon-free nuclear power for millennia.

CANDU reactor

Built for under \$2000 per kw in china. Can run on broad range of fuel, but doesn't fully transmute all actinides.

CANDU has a good neutron economy because heavy water has lower parasitic neutron capture than light water. That's why they can operate with natural uranium. Which also means CANDU can be fueled with a lot of alternate fuels -- reconstituted LWR spent fuel (so-called DUPIC cycle), reprocessed uranium from LWR spent fuel (U-235 content is

still higher than natural uranium), and even plutonium or TRU containing fuel.

However, CANDU as well as any other thermal spectrum reactors cannot transmute minor actinides effectively. They convert actinides to even higher actinides than consuming them. Some are consumed but the net effect in long term radiological toxicity is insignificant.

Actinides can be consumed effectively only in fast reactors.

Next Steps

A request by GE for a 810 determination that the IFR is not sensitive nuclear technology seems to me to be the next step so discussions can be held with Russia, China, India, Japan, and South Korea.

What are the easy steps that Dr. Chu can authorize?

1) Start the NRC licensing process of PRISM (using the Fuel Cycle R&D funds). This make progress transparent to all stakeholders.

2) Start the DOE Project Management requirements to get Congressional funding. (DOE Order 413.3)

3) With 1 started.... confidence come back to the system. With 2 done you use the 1992 Energy Policy Act to start PRISM. This puts the government action into doing appropriations, which seems to be a bit easier than authorization language.

Miscellaneous factoids about the IFR

1. Even with LWR, the EROEI (energy returned on energy invested) is so high that you could profitably 'mine' seawater for U at a decent energy return. So with conventional (~10 MtU) + phosphates (~30 MtU) we have at least 40 MtU of mineable U [probably substantially more] and another 4600 MtU in seawater. Let's imagine we ran 10,000 GWe of LWR to supply all worldwide energy needs (including liquid fuel replacement). That's a 27 fold increase compared to the

output of LWR today. Current 370 GWe needs 65,000 tU/yr (if we weren't using weapons Pu also). So 10,000 GWe of LWR would need 1.75 MtU. We have over 2,500 years of fuel – before we go to Th. Sea water extraction has been estimated at <\$1,000/kg, which is expensive, but still about 100 times cheaper than coal, per joule. Of course it would be ludicrous to continue to use LWR beyond the next 50 years or so, but the point is that U is not going to run out even with a major expansion of LWR over the next few decades, as IFRs ramp up.

Bottom line: IFRs win hands down in the sustainability, safety and waste management stakes, and pyroprocessing trounces PUREX in regards to proliferation resistance. But LWRs are still a superb clean energy generation technology and a massive rollout of these, side by side with fast reactors, is (now, after understanding the issues) fine by me. We need all the extra Pu for initial IFR loadings that we can get. There is no need to dismiss LWR to win the IFR argument, in my humble opinion.

Before Al Gore became VP, he wrote a book *Earth in the balance: "Ecology and the Human Spirit."* On page 328, he wrote: "The research and development of alternative approaches should focus on discovering, first, how to build a passively safe design (whose safety does not depend upon the constant attention of bleary-eyed technicians) that eliminates many risks of current reactors, and second, whether there is a scientifically and politically acceptable means of disposing of – in fact, isolating, nuclear waste." So that's exactly what the IFR provides. So it meets his criteria, but he won't endorse it and will not explain why he won't.

IFRs can be used to replace the burners in a coal plant. You cannot do that with a normal LWR reactor.

Even if you don't believe in global warming, you should definitely believe in the Atmospheric Brown Cloud (ABC). It's coming our way. Nuclear and the IFR is the best way to stop it.

A kilogram of uranium contains about as much energy as two million kilograms of coal, and coal is already a concentrated form of energy. So it's an incredibly concentrated form of energy if you can harness it to its full advantage.

A short IFR pitch

IFR story is a story of how the US government paid billions to our National Laboratories to engineer a solution to the energy and climate crisis (before it became a crisis), the solution worked, then President Clinton cancelled the project telling the world in his State of the Union speech that this power was "unnecessary."

Nuclear provides 70% of our clean energy in the US, even though we haven't built a new reactor in 30 years!

Despite nuclear being the elephant in the room, the world "nuclear" appears only TWICE in Waxman-Markey. That is absurd since we have 10 times as much energy just in the Depleted Uranium waste (which is just sitting there) than we have coal in the ground.

We are currently not doing anything to exploit our largest energy resource (which is also one of our cleanest). This reactor is ready to be built, GE has a design ready to built, and we are doing NOTHING.

More information on the IFR

1. [Why We Should Build an Integral Fast Reactor Now.](#) Opinion piece on my blog
2. [Meet the Man Who Could End Global Warming](#) Esquire Magazine named the IFR expert at GE as the Best and Brightest of 2009
3. [Plentiful Energy and the IFR Story:](#) Article by Charles Till explaining the IFR (a must read)

4. Operating and test experience with EBR-II, the IFR prototype. An excellent paper discussing the IFR.
5. DOE study: 242 experts from all over the world compared 19 different nuclear reactor designs on 27 criteria: The IFR was rated #1. The obvious conclusion is that if you are going to build new nuclear plants, this is the design to pursue.
6. "Nuclear power plants - now safer and cheaper (15 minute audio)
I highly recommend this. Barry Brook traces the history of nuclear power. Today, about 440 nuclear power reactors are in use, known as Generation 2 reactors. These were designed between 1960 and 1980. Recently, Generation 3 reactors have adopted a standard design, allowing for faster approval. 45 are being built. 350 are planned. Chernobyl was a cheap design. There was no containment building. Barry Brook describes Chernobyl as an accident waiting to happen. Newer reactors are orders of magnitude safer than the older models. Generation 4 is the new excitement. Efficiency is much higher meaning uranium supplies will last so much longer. They can burn a range of isotopes of uranium and other elements producing short-lived waste."
7. The Integral Fast Reactor (IFR) project: Q&A: this page compiles answers the disadvantages brought up on the wikipedia page and other issues that people bring up
8. Tell Barack Obama the Truth -- The Whole Truth November 21, 2008 article by James Hansen on why restarting the IFR should be a priority
9. Mark Lynas: the green heretic persecuted for his nuclear conversion article by Mark Lynas describing how Lynas was surprised to find the "Green case against nuclear power is based largely on myth and dogma"

10. [Jim Hansen's August 4, 2008 trip report: Hansen describes, for the first time, how he first heard of the IFR](#)
11. [IFR Q&A with Congress \(Stanford answers\)](#)
12. [IFR Q&A with Congress \(Kirsch answers\)](#)
13. [IFR Q&A with Congress \(Blees answers\)](#)
14. [Comments on the Misguided Termination of the IFR Project: a must read!](#)
15. [The Integral Fast Reactor \(IFR\) information page at UC Berkeley: An excellent summary of the technology and benefits](#)
16. [PBS Frontline interview with Argonne Lab Director Charles Till](#)
17. [Argonne Q&A: If the IFR is as good as it sounds, how come nobody is using it?](#)
18. [Speech by Charles Till to Canadian Scientists about the IFR project](#)
19. [Argonne Q&A about the IFR project](#)
20. [Integral Fast Reactors: Source of Safe, Abundant, Non-Polluting Power: Article explaining the IFR by George S. Stanford, Ph.D., a scientist who worked on it.](#)
21. [Wikipedia page on the Integral Fast Reactor](#)
22. [Hannum, W. H., G. E. Marsh and G. S. Stanford, "Smarter Use of Nuclear Waste." Scientific American, December 2005, pp 84-91](#)
23. [Opinion: How a 24-year-old technology can save the planet \(Dec 7, 2008\): an op-ed on how the IFR could save the planet](#)
24. [Friends of the Earth Australia critique of the IFR where Blees responds with his comments Integral Fast Reactors for the masses. Barry Brook is currently drafting a direct response. Note that 68% of India's CO2 emissions are from coal! 20% of worldwide GHG emissions are from coal. See Coal and Climate Change Facts: The Pew Center on Global Climate Change](#)
25. [Nuking green myths, an excellent op-ed written by Barry Brook and published in The Australian](#)
26. [How Does Obama Expect to Solve the Climate Crisis Without a Plan? Huffington Post opinion on why nuclear is the best solution to the climate crisis](#)

27. Climate Bill Ignores Our Biggest Clean Energy Source: Huffington Post opinion on nuclear and the IFR.
28. Nukes: a necessary part of our future? A balanced look at the problem and the first comment sums up the situation quite nicely
29. Kirsch Family Movie on How to Solve the Climate Crisis: This is a more entertaining version of what you've just read (3 minutes)
30. The Truth About Energy: More generic site about nuclear power.
31. Retirement of Dr. Charles Till: this says it all in one page. "Unfortunately, this program was canceled just 2 short years before the proof of concept. I assure my colleagues someday our Nation will regret and reverse this shortsighted decision."

Knowledgeable people on IFR technology

- Tom Bles: Author of Prescription for the Planet. He is a writer with absolutely no ties to the nuclear industry or any other interest, financial or otherwise, in the technologies presented in his plan for a global energy revolution. He simply wants to solve the world's most intractable problems
- Jasmina Vujic: She's the chairperson of the Dept. of Nuclear Engineering at U.C. Berkeley, well-versed in the state of reactor design and current areas of research into commercial nuclear power.
- Yoon Chang: Yoon is considered to be the world's leading expert on IFR technology. He worked with Charles Till for years on the project at Argonne Labs, and took over as director when Charles retired.
- Eric Loewen: Eric is the lead nuclear engineer for General Electric's Generation IV reactor project. GE has already proposed to the Global Nuclear Energy Partnership (GNEP) that they be chosen to build the prototype plant, and they've developed the design (based largely on the IFR research at Argonne) to take nuclear power to this new level.

- George Stanford: One of the IFR project nuclear physicists. George has not only a deep understanding of the technology but a knack for communicating that knowledge.

Steve Kirsch Home Page (short version)

The Nuclear Integral Fast Reactor IFR and S-PRISM EFFICIENT FOURTH GENERATION NUCLEAR DESIGN

FROM ENERGY ENHANCEMENT

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Overview

IFR BURNS ALL Nuclear waste.

IFR 30,000% INCREASED Efficiency. IFRs use virtually all of the energy content in the Uranium or Thorium fuel whereas a traditional light water reactor uses less than 1% of that energy content. This means that breeder reactors can power the energy needs of the planet for over a billion years.

This reactor is cooled by liquid sodium and fueled by a metallic alloy of uranium and plutonium. The fuel is contained in steel cladding with liquid sodium filling in the space between the fuel and the cladding.

The Integral Fast Reactor (originally Advanced Liquid-Metal Reactor) was a design for a fast reactor (nuclear reactor using fast neutrons and no neutron moderator) distinguished by a nuclear fuel cycle using reprocessing via electrorefining at the reactor site itself.

Experimental Breeder Reactor II, which served as the prototype for the Integral Fast Reactor

The U.S. Department of Energy built a prototype but canceled the project in 1994, three years before completion. The predecessor was the Experimental Breeder Reactor II. The Generation IV Sodium-Cooled Fast Reactor is its successor as the currently proposed U.S sodium-cooled fast breeder reactor design. Other countries have also designed and operated their own fast reactors.

Global significance

Most world energy experts, including US Secretary of Energy Steven Chu, believe that renewables are not sufficient to meet the world's energy requirements, even in the US, and that nuclear must be part of the mix. The mix, continued use of highly polluted coal because of coal owner money. In a major DOE study in 2002, the IFR was judged to be the best nuclear design available. [1]

Long-lived fission products				
Prop:	$t^{1/2}$	Yield	Q *	$\beta\gamma$
Unit:	Ma	%	KeV	*
<u>^{99}Tc</u>	0.211	6.1385	294	β
<u>^{126}Sn</u>	0.230	0.1084	4050	$\beta\gamma$
<u>^{79}Se</u>	0.295	0.0447	151	β
<u>^{93}Zr</u>	1.53	5.4575	91	$\beta\gamma$
<u>^{135}Cs</u>	2.3	6.9110	269	β
<u>^{107}Pd</u>	6.5	1.2499	33	β
<u>^{129}I</u>	15.7	0.8410	194	β

Breeder reactors (such as the IFR) in principle could use almost all of the energy in uranium or thorium, thus potentially decreasing fuel requirements by nearly two orders of magnitude. This in turn could dampen concern about fuel supply or energy used in mining[2]

Breeder reactors can “burn” some components (actinides: reactor-grade plutonium and minor actinides) of nuclear waste, which could turn a nuclear liability into an asset. Another major waste component, fission products, would stabilize at a lower level of radioactivity from long-lived fission products in a few centuries, rather than tens of thousands of years. The fact that 4th generation reactors are being designed to use the waste from 3rd generation plants could change the nuclear story fundamentally – potentially making the

combination of 3rd and 4th generation plants a more attractive energy option than 3rd generation by itself would have been, both from the perspective of waste management and long-term energy security.



Safety

In traditional water-cooled reactors the core must be maintained at a high pressure to keep the water liquid at high temperatures. In contrast, since the IFR is a liquid metal cooled reactor, the core could operate at close to ambient pressure, dramatically reducing the danger of a loss of coolant accident. The entire reactor core, heat exchangers and primary cooling pumps are immersed in a pool of liquid sodium, making a loss of primary coolant extremely unlikely. The coolant loops are designed to allow for cooling through natural convection, meaning that in the case of a power loss or unexpected reactor shutdown, the heat from the reactor core

would be sufficient to keep the coolant circulating even if the primary cooling pumps were to fail.

The IFR also utilizes a passively safe fuel configuration. The fuel and cladding are designed such that when they expand due to increased temperatures, more neutrons would be able to escape the core, thus reducing the rate of the fission chain reaction. At sufficiently high temperatures, this effect would stop the reactor even without external action from operators or safety systems. This was demonstrated in a series of safety tests on the prototype.

Liquid sodium presents safety problems because it ignites spontaneously on contact with air and can cause explosions on contact with water. To reduce the risk of explosions following a leak of water from the steam turbines, the IFR design (as with other sodium-cooled fast reactors) includes an intermediate liquid-metal coolant loop between the reactor and the steam turbines. The purpose of this loop is to ensure that any explosion following accidental mixing of sodium and turbine water would be limited to the secondary heat exchanger and not pose a risk to the reactor itself.

According to IFR inventor Charles Till, no radioactivity will be released under any plausible circumstance. A wide range of unexpected events that would cause destructive and hazardous failures in other reactor systems would not damage the IFR.

Efficiency and fuel cycle

The goals of the IFR project were to increase the efficiency of uranium usage by breeding plutonium and eliminating the need for transuranic isotopes ever to leave the site. The reactor was an unmoderated design running on fast neutrons, designed to allow any transuranic isotope to be consumed (and in some cases used as fuel).

Medium-lived fission products				
Prop:	$t_{1/2}$	Yield	Q^*	$\beta\gamma$
Unit:	a	%	KeV	*
<u>^{155}Eu</u>	4.76	.0803	252	$\beta\gamma$
<u>^{85}Kr</u>	10.76	.2180	687	$\beta\gamma$
<u>$^{113\text{m}}\text{Cd}$</u>	14.1	.0008	316	β
<u>^{90}Sr</u>	28.9	4.505	2826	β
<u>^{137}Cs</u>	30.23	6.337	1176	$\beta\gamma$
<u>$^{121\text{m}}\text{Sn}$</u>	43.9	.00005	390	$\beta\gamma$
<u>^{151}Sm</u>	90	.5314	77	β

Compared to current light-water reactors with a once-through fuel cycle that induces fission (and derives energy) from less than 1% of the uranium found in nature, a breeder reactor like the IFR has a very efficient (99.5% of uranium undergoes fission) fuel cycle.[3] The basic scheme used electrolytic separation to remove transuranics and actinides from the wastes and concentrate them. These concentrated fuels were then reformed, on site, into new fuel elements.

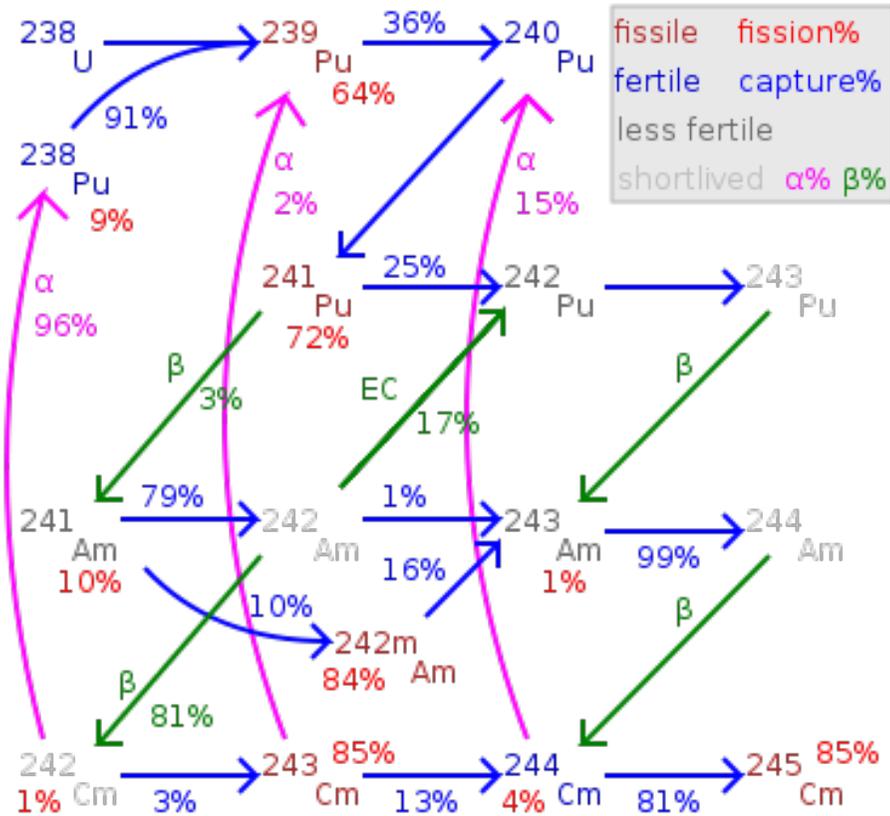
The available fuel metals were never separated from the plutonium, and therefore there was no direct way to use the fuel metals in nuclear weapons. Also, plutonium never had to leave the site, and thus was far less open to unauthorized diversion.

Another important benefit of removing the long half-life transuranics from the waste cycle is that the remaining waste becomes a much shorter-term hazard. After the actinides (reprocessed uranium, plutonium, and minor actinides) are recycled, the remaining radioactive waste isotopes are fission products, with half-life of 90 years (Sm-151) or less or 211,100 years (Tc-99) and more; plus any activation products from the

non-fuel reactor components. (Tc-99 and Iodine-129 are also candidates for nuclear transmutation to stable isotopes by neutron capture.)

The result is that within 200 years, such wastes are no more radioactive than the ores of natural radioactive elements.[3]

Comparisons to light-water reactors



Buildup of heavy actinides in present thermal reactors,[4] which cannot fission actinide nuclides that have an even number of neutrons. Fast reactors can fission all actinides.

IFR BURNS ALL Nuclear waste

IFR-style reactors produce much less waste than LWR-style reactors, and can even consume other waste as fuel.

The primary argument for pursuing IFR-style technology today is that it provides the best solution to the existing nuclear waste problem because breeder reactors can be fueled from the waste products of existing reactors as well as from the plutonium used in weapons. Depleted uranium (DU) waste can also be used as fuel in IFR reactors.

The waste products of IFR reactors either have a short half-life, which means that it quickly "burns out" and ends up relatively safe, or a long half-life, which means that they are unlikely to emit a significant amount of protons except from very large quantities. The volume of highly-radioactive waste is 5% or 1/20th the volume as compared to a light water plant of the same size. The high level waste from reprocessing is highly radioactive for only 400 years instead of 10,000 years.

The two forms of waste produced from IFR, a noble metal form and a ceramic form, contain no plutonium or other actinides. The radioactivity of the waste decays to levels similar to the original ore in about 200 years.[3]

The on-site reprocessing of fuel means that the volume of nuclear waste leaving the plant is tiny compared to LWR spent fuel.[5] In fact, in the U.S. most spent LWR fuel has remained in storage at the reactor site instead of being transported for reprocessing or placement in a geological repository. The smaller volumes of high level waste from reprocessing could stay at reactor sites for some time, but are intensely radioactive from medium-lived fission products and need to be stored securely. Repository capacity is constrained not by volume but by heat generation, and heat generation from medium-lived fission products is about the same per unit power from any kind of fission reactor, limiting early repository emplacement.

"Others counter that actinide removal would offer few if any significant advantages for disposal in a geologic repository because some of the fission product nuclides of greatest concern in scenarios such as groundwater leaching actually have longer half-lives than the radioactive actinides. The concern about a waste cannot end after hundreds of years even if all the actinides are removed when the remaining waste contains radioactive fission products such as technetium-99, iodine-129, and cesium-135 with the half-lives between 213,000 and 15.7 million years" [6]

IFR 30,000% INCREASED Efficiency

IFRs use virtually all of the energy content in the uranium fuel whereas a traditional light water reactor uses less than 1% of that energy content. This means that breeder reactors can power the energy needs of the planet for over a billion years. [7]

Carbon dioxide

IFRs and LWRs both emit no CO₂ during operation, although construction and fuel processing may require small CO₂

Fuel cycle BURNS ALL FUEL PRODUCING NO WASTE

Fast reactor fuel must be at least 20% fissile, greater than the low enriched uranium used in LWRs. The fissile material could initially include highly enriched uranium or plutonium, from LWR spent fuel, decommissioned nuclear weapons, or other sources. During operation the reactor breeds more fissile material from fertile material.

The fertile material in fast reactor fuel can be depleted uranium (mostly U-238), natural uranium, or reprocessed

uranium from spent fuel from traditional light water reactors,[3] and even include nonfissile isotopes of plutonium and minor actinide isotopes. Assuming no leakage of actinides to the waste stream during reprocessing, a 1GWe IFR-style reactor would consume about 1 ton of fertile material per year

<u>Actinides</u>				<u>Half-life</u>	<u>Fission products</u>			
²⁴⁴ Cm	²⁴¹ Pu f	²⁵⁰ Cf	²⁴³ Cm f	10–30 y	¹³⁷ Cs	⁹⁰ Sr	⁸⁵ Kr	
²³² U f		²³⁸ Pu	f is for	69–90 y			¹⁵¹ Sm nc→	
<u>4n</u>	²⁴⁹ Cf f	²⁴² Am f	<u>fissile</u>	141–351	No fission product has half-life 10 ² to 2×10 ⁵ years			
	²⁴¹ Am		²⁵¹ Cf f	431–898				
²⁴⁰ Pu	²²⁹ Th	²⁴⁶ Cm	²⁴³ Am	5–7 ky				
	²⁴⁵ Cm f	²⁵⁰ Cm	²³⁹ Pu f	8–24 ky				
<u>4n</u>	²³³ U f	²³⁰ Th	²³¹ Pa	32–160				
		²³⁴ U		211–290	⁹⁹ Tc		¹²⁶ Sn	⁷⁹ Se
²⁴⁸ Cm	<u>4n+1</u>	²⁴² Pu	<u>4n+3</u>	340–373	<u>Long-lived fission products</u>			
	²³⁷ Np			1–2 my	⁹³ Zr	¹³⁵ Cs nc→		
²³⁶ U		<u>4n+2</u>	²⁴⁷ Cm f	6–23		¹⁰⁷ Pd	¹²⁹ I	
²⁴⁴ Pu	<u>4n+1</u>			80 my	>7%	>5%	>1%	>.1%
²³² Th		²³⁸ U	²³⁵ U f	0.7–12by	<u>fission product yield</u>			

and produce about 1 ton of fission products.

The IFR fuel cycle's reprocessing by pyroprocessing (in this case, electrorefining) does not need to produce pure plutonium free of fission product radioactivity as the PUREX process is designed to do. The purpose of reprocessing in the IFR fuel cycle is simply to reduce the level of those fission products that are neutron poisons; even those need not be

completely removed. The electrorefined spent fuel is highly radioactive, but because new fuel need not be precisely fabricated like LWR fuel pellets but can simply be cast, remote fabrication can be used, reducing exposure to workers.

Like any fast reactor, by changing the material used in the blankets, the IFR can be operated over a spectrum from breeder to self-sufficient to burner. In breeder mode (using U-238 blankets) it will produce more fissile material than it consumes. This is useful for providing fissile material for starting up other plants. Using steel reflectors instead of U-238 blankets, the reactor operates in pure burner mode and is not a net creator of fissile material; on balance it will consume fissile and fertile material and, assuming loss-free reprocessing, output no actinides but only fission products and activation products. Amount of fissile material needed could be a limiting factor to very widespread deployment of fast reactors, if stocks of surplus weapons plutonium and LWR spent fuel plutonium are not sufficient. To maximize the rate at which fast reactors can be deployed, they can be operated in maximum breeding mode.

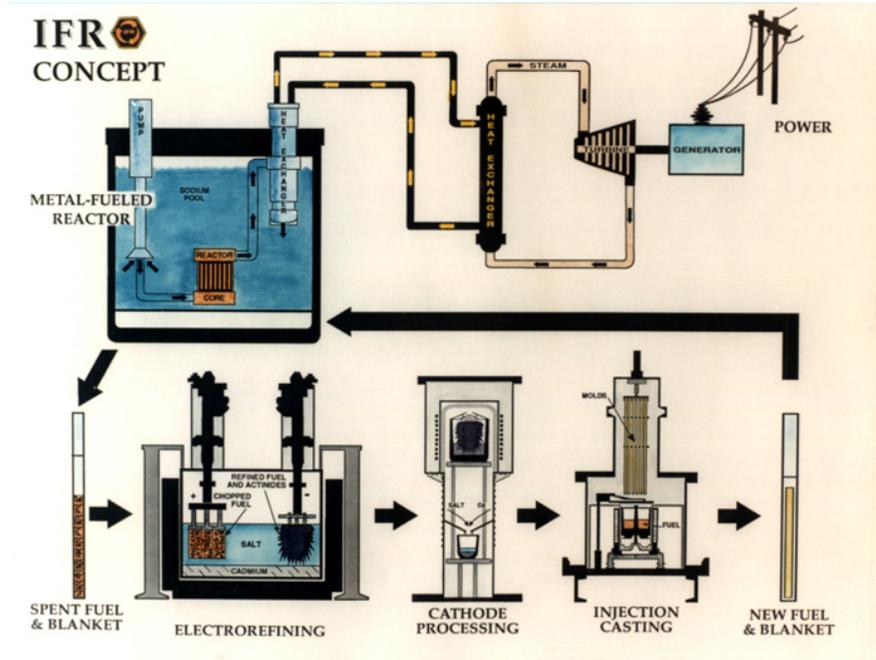
Because the current cost of enriched uranium is low compared to the expected cost of large-scale pyroprocessing and electrorefining equipment and the cost of building a secondary coolant loop, the higher fuel costs of a thermal reactor over the expected operating lifetime of the plant are offset by increased capital cost. (Currently in the United States, utilities pay a flat rate of 1/10 of a cent per kilowatt hour for disposal of high level radioactive waste. If this charge were based on the longevity of the waste, closed fuel cycles might become more financially competitive.)

IFR concept

Reprocessing nuclear fuel using pyroprocessing and electrorefining has not yet been demonstrated on a commercial scale, so investing in a large IFR-style plant may

be a higher financial risk than a conventional light water reactor.

INCREASED Passive safety



The IFR uses metal alloy fuel (uranium/plutonium/zirconium) which is a good conductor of heat, unlike the LWR's (and even some fast breeder reactors') uranium oxide which is a poor conductor of heat and reaches high temperatures at the center of fuel pellets. The IFR also has a smaller volume of fuel, since the fissile material is diluted with fertile material by a ratio of 5 or less, compared to about 30 for LWR fuel. The IFR core requires more heat removal per core volume during operation than the LWR core; but on the other hand, after a shutdown, there is far less trapped heat that is still diffusing out and needs to be removed. However, decay heat generation from short-lived fission products and actinides is comparable in both cases, starting at a high level and decreasing with time elapsed after shutdown.

Self-regulation of the IFR's power level depends mainly on thermal expansion of the fuel which allows more neutrons to escape, damping the chain reaction. LWRs have less effect from thermal expansion of fuel (since much of the core is the neutron moderator) but have strong negative feedback from Doppler broadening (which acts on thermal and epithermal neutrons, not fast neutrons) and negative void coefficient from boiling of the water moderator/coolant; the less dense steam returns fewer and less-thermalized neutrons to the fuel, which are more likely to be captured by U-238 than induce fissions.

IFRs are able to withstand both a loss of flow without SCRAM and loss of heat sink without SCRAM. In addition to passive shutdown of the reactor, the convection current generated in the primary coolant system will prevent fuel damage (core meltdown). These capabilities were demonstrated in the EBR-II.[8] The ultimate point is that no radioactivity will be released under any circumstance. According to IFR inventor Charles Till, under even very, very unlikely circumstances which would lead to a mess in other reactors, it would not even incur damage.

The flammability of sodium is a risk to operators. Sodium burns easily in air, and will ignite spontaneously on contact with water. The use of an intermediate coolant loop between the reactor and the turbines minimizes the risk of a sodium fire in the reactor core.

Under neutron bombardment, sodium-24 is produced. This is highly radioactive, emitting an energetic gamma ray of 2.7 MeV followed by a beta decay to form magnesium-24. Half life is only 15 hours, so this isotope is not a long-term hazard - indeed it has medical applications. Nevertheless, the presence of sodium-24 further necessitates the use of the intermediate coolant loop between the reactor and the turbines.

Proliferation

IFRs and LWRs both produce plutonium, which can be used for weapons production, but the IFR fuel cycle has some design features that make proliferation more difficult. Unlike PUREX reprocessing, the IFR's electrolytic reprocessing, at least of spent fuel itself, need not separate out pure plutonium. The plutonium also stays at the reactor site and can be consumed by the same or other reactors. While it is possible to extract the plutonium, international monitoring of a closed system is claimed to be much easier than one that has external reprocessing.

Because reactor-grade plutonium contains isotopes of plutonium with high spontaneous fission rates, it is more difficult, though not impossible, to produce nuclear weapons from high-burnup spent fuel. This also could be circumvented with isotopic separation, but this is more difficult than uranium enrichment due to the high radioactivity of the plutonium.

Proliferation risks are not eliminated. "The plutonium from ALMR recycled fuel would have an isotopic composition similar to that obtained from other spent nuclear fuel sources. Whereas this might make it less than ideal for weapons production, it would still be adequate for unsophisticated nuclear bomb designs. In fact the U.S. government detonated a nuclear device in 1962 using low-grade plutonium typical of that produced by civilian powerplants." [9] "If, instead of processing spent fuel, the ALMR system were used to reprocess irradiated fertile (breeding) material in the electrorefiner, the resulting plutonium would be a superior material, with a nearly ideal isotope composition for nuclear weapons manufacture" [10]

Reactor design and construction

A commercial version of the IFR, S-PRISM, can be built in a factory and transported to the site. This modular design (311

MWe modules) reduces costs and allows nuclear plants of various sizes (311 MWe and any integer multiple) to be economically constructed.

Cost assessments taking account of the complete life cycle show that fast reactors could be no more expensive than the most widely used reactors in the world – water-moderated water-cooled reactors.[11]

History

Research on the reactor began in 1984 at Argonne National Laboratory in Argonne, Illinois. Argonne is a part of the U.S. Department of Energy's national laboratory system, and is operated on a contract by the University of Chicago.

Argonne previously had a branch campus named "Argonne West" in Idaho Falls, Idaho that is now part of the Idaho National Laboratory. In the past, at the branch campus, physicists from Argonne had built what was known as the Experimental Breeder Reactor II (EBR II). In the mean time, physicists at Argonne had designed the IFR concept, and it was decided that the EBR II would be converted to an IFR. Charles Till, a Canadian physicist from Argonne, was the head of the IFR project, and Yoon Chang was the deputy head. Till was positioned in Idaho, while Chang was in Illinois.

With the election of President Bill Clinton in 1992, and the appointment of Hazel O'Leary as the Secretary of Energy, there was pressure from the top to cancel the IFR. Sen. John Kerry (D, MA) and O'Leary led the opposition to the reactor, arguing that it would be a threat to non-proliferation efforts, and that it was a continuation of the Clinch River Breeder Reactor Project that had been canceled by Congress.

IFR opponents also presented a report[12] by the DOE's Office of Nuclear Safety regarding a former Argonne employee's allegations that Argonne had retaliated against him for raising concerns about safety, as well as about the quality of research

done on the IFR program. The report received international attention, with a notable difference in the coverage it received from major scientific publications. The British journal Nature entitled its article "Report backs whistleblower", and also noted conflicts of interest on the part of a DOE panel that assessed IFR research.[13]. In contrast, the article that appeared in Science was entitled "Was Argonne Whistleblower Really Blowing Smoke?".[14] Remarkably, that article did not disclose that the Director of Argonne National Laboratories, Alan Schriesheim, was a member of the Board of Directors of Science's parent organization, the American Association for the Advancement of Science.[15]

Despite support for the reactor by then-Rep. Richard Durbin (D, IL) and U.S. Senators Carol Mosley Braun (D, IL) and Paul Simon (D, IL), funding for the reactor was slashed, and it was ultimately canceled in 1994 by S.Amdt. 2127 to H.R. 4506.

In 2001, as part of the Generation IV roadmap, the DOE tasked a 242 person team of scientists from DOE, UC Berkeley, MIT, Stanford, ANL, LLNL, Toshiba, Westinghouse, Duke, EPRI, and other institutions to evaluate 19 of the best reactor designs on 27 different criteria. The IFR ranked #1 in their study which was released April 9, 2002.[1]

At present there are no Integral Fast Reactors in commercial operation.

See also

- [Experimental Breeder Reactor II](#)
- [Fast breeder reactor](#)
- [Fast neutron reactor](#)
- [Gas-cooled fast reactor](#)
- [Generation IV reactor](#)
- [Lead-cooled fast reactor](#)
- [Light water reactor](#)
- [Molten salt reactor](#)
- [Sodium-cooled fast reactor](#)

- S-PRISM
- Traveling wave reactor

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3. [^] [a b c d An Introduction to Argonne National Laboratory's INTEGRAL FAST REACTOR \(IFR\) PROGRAM](#)
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6. [^] [Technical options for the advanced liquid metal reactor](#), page 30
7. [^] [How long will nuclear energy last?](#)
8. [^] [The IFR at Argonne National Laboratory](#)
9. [^] [Technical options for the advanced liquid metal reactor](#), page 34
10. [^] [Technical options for the advanced liquid metal reactor](#), page 36
11. [^] [BN-800 as a New Stage in the Development of Fast Sodium-Cooled Reactors](#)
12. [^] [Report of investigation into allegations of retaliation for raising safety and quality of work issues regarding Argonne National Laboratory's Integral Fast Reactor Project, Report Number DOE/NS-0005P, 1991 Dec 01 OSTI Identifier OSTI ID: 6030509,](#)
13. [^] [Report backs whistleblower, Nature 356, 469 \(9 April 1992\)](#)
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15. [^ http://www.sciencemag.org/cgi/issue_pdf/toc_pdf/256/5055.pdf](http://www.sciencemag.org/cgi/issue_pdf/toc_pdf/256/5055.pdf)

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External links

- [The Unofficial IFR home page](#) and [\(archived\) page index](#)
 - [Introduction](#)
 - [Integral Fast Reactor](#)
 - [IFR Metallic Fuel](#)
 - [Safety Characteristics](#)
 - [Fuel Cycle Facility](#)
 - [Fuel Manufacturing Facility](#)
 - [The IFR Vision](#)
 - [Reactor Burns Waste as Fuel in Nuclear Recycling Experiment](#)
- [Integral Fast Reactors: Source of Safe, Abundant, Non-Polluting Power](#) by George S. Stanford, Ph.D.
- [The IFR at Argonne National Laboratory](#)
- [Frontline interview with Dr. Till](#).
- [IFR Q&A with Tom Blee and George Stanford](#)
- [Integral Fast Reactors by Tom Blee, part 2 of 3 Interview with author Tom Blee about IFR.](#)
- [The IFR's role in global warming](#)
- ["New" Nuclear Reactors, Same Old Story](#) RMI, [Amory Lovins](#)
- [PRISM IFR \(drawing\)](#)

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Science

[Physics](#) • [Fission](#) • [Fusion](#) • [Radiation \(ionizing\)](#) • [Nucleus](#) •

[Nucle](#)

Fuel | Fissile · Fertile · Thorium · Uranium (enriched · depleted)

Neutron | Temp · Thermal · Fast · Fusion · Cross section · Capture · A

Fission reactors
by
moderator | Water | Pressurized (PWR) · Boiling (BWR) · Supercritical

| Carbon | Pebble bed (PBMR) · Very high temperature (VHTR)

| FLiBe | Molten salt (MSR)

| None (Fast) | Breeder (FBR) · Liquid-metal-cooled (LMFR)
Generation IV by coolant: (Gas (GFR) · Lead (LFR))

Power | By country · Economics · Safety · Fusion · Isotope thermoelectric

Medicine | Imaging | Gamma camera based: Scintigraphy · Positron emission tomography (PET)
X-ray based: Projectional radiography · Computed tomography (CT)

| Therapy | Radiation therapy · Tomotherapy · Proton · Neutron

Weapon | Topics | History · Design · War · Race · Explosion (effects)

| Lists | States · Tests · Weapons · Free zones · Treaties · Agreements

Waste | Products | Fission (LLFP) · Activation · Actinide: (Reprocessing)

| Disposal | Fuel cycle · Spent fuel (pool · cask) · HLW · LLW

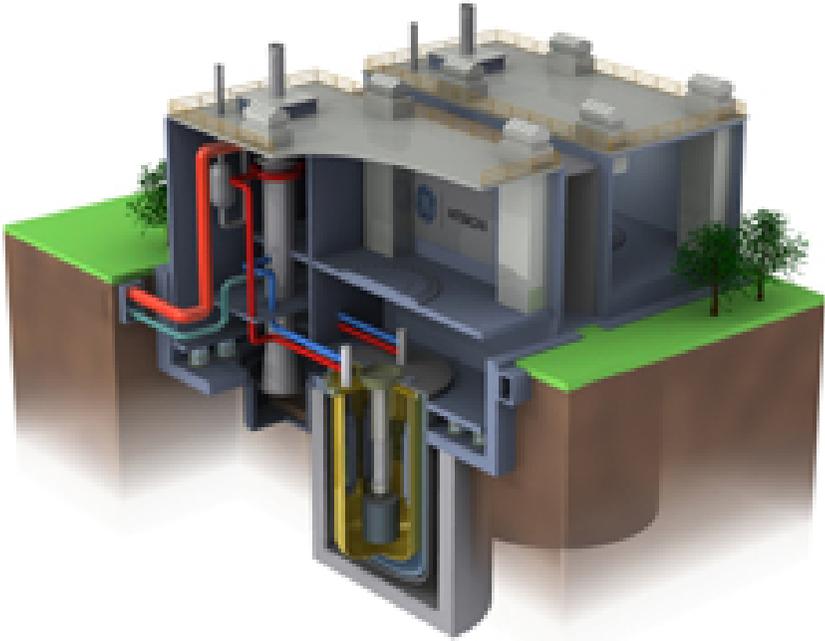
Retrieved from

"http://en.wikipedia.org/wiki/Integral_Fast_Reactor"

Categories: Nuclear reactors | Nuclear power reactor

types | Uncompleted nuclear reactors

S-PRISM



Drawing of the PRISM Reactor

S-PRISM, also called PRISM (Power Reactor Innovative Small Module), is the name of a nuclear power plant design by General Electric-Hitachi based on a sodium-cooled fast breeder reactor[1].

The design utilizes reactor modules, each having a power output of 311 MWe, to enable factory fabrication at low cost. The design is based on the Integral Fast Reactor.

The Integral Fast Reactor was developed at the West Campus of the Argonne National Laboratory in Idaho Falls, Idaho and was the intended successor to the Experimental Breeder Reactor II. The Integral Fast Reactor project was shut down

by the U.S. Congress in 1994. The S-PRISM represents General Electric-Hitachi's Generation IV reactor solution to closing the nuclear fuel cycle and is also part of its Advanced Recycling Center proposition[2] to U.S. Congress to deal with nuclear waste.

References

1. [^ GE Energy press release](#)
2. [^ Testimony to U.S. Congress](#)
- 3.

Nuclear power: Going fast

Jun 23, 2009 11:28 EDT

I was offline most of yesterday attending a high-intensity series of presentations hosted by Esquire magazine in the magnificent suite of rooms at the top of the new Hearst tower. GE's Eric Loewen was there, talking about nuclear power, and specifically what he calls a PRISM reactor — a fourth-generation nuclear power station which runs on the nuclear waste generated by all the previous generations of nuclear power stations.

PRISM is GE's name for an integral fast reactor, or IFR, and it's a pretty great technology. The amount of fuel which already exists for such reactors would be enough to power the world for millennia — no new mining needed. Fast reactors also solve at a stroke the problem of what to do with the vast amounts of nuclear waste which are being stockpiled unhappily around the world. They're super-safe: if they fail they just stop working, they don't melt down. And they can even literally replace coal power stations:

One nice thing about the S-PRISM is that they're modular units and of relatively low output (one power block of two will provide 760 MW). They could be emplaced in excavations at existing coal plants and utilize the same turbines, condensers

(towers or others), and grid infrastructure as the coal plants currently use, and the proper number of reactor vessels could be used to match the capabilities of those facilities. Essentially all you'd be replacing is the burner (and you'd have to build a new control room, of course, or drastically modify the current one). Thus you avoid most of the stranded costs. If stranded costs can thus be kept to a minimum, both here and, more importantly, in China, we'll be able to talk realistically not just about stopping to build new coal plants but replacing the existing ones, even the newest ones.

And best of all they're eminently affordable: Loewen showed that they could be profitable selling energy at just 5 cents per kWh — which means that you don't need to price carbon emissions at all to make these power stations economically attractive. With pricing on carbon emissions, of course, they become even economically compelling.

So what's the problem? They're untested, and the regulators in the US will take many years and many billions of dollars before they will approve such a project. And legislation is needed, too — including legislation allowing the use of nuclear waste as a fuel. But mainly all that's needed is political will. It's unclear the degree to which Steven Chu, the US energy secretary, supports this technology. But if he puts the weight of the Obama administration into supporting this technology and trying to make it a reality, then a lot of private capital will start flowing into the area. And it might be much, much easier to achieve ambitious carbon-emission reduction targets than many people currently think.

Press releases

GEH's "Generation IV" PRISM reactor technology

Nuclear Fuel Recycling Technology Leadership Earns GE Engineer Prestigious Honor from American Nuclear Society

WILMINGTON, N.C.—June 16, 2009—GE Hitachi Nuclear Energy (GEH) announced today that the American Nuclear Society (ANS) has honored engineer Charles Boardman with the prestigious Cisler Medal for his decades of leadership in the development of GEH’s “Generation IV” PRISM reactor technology.

The PRISM reactor is a cornerstone of GEH’s proposed Advanced Recycling Center (ARC) for recycling spent fuel from nuclear power plants. The technology offers a timely solution to one of the industry’s most significant public policy and environmental challenges, turning spent nuclear fuel into an asset.

“Charles Boardman’s commitment to the development of advanced nuclear reactor and fuel recycling technology could provide significant benefits for the United States for many decades to come,” said ANS President William E. Burchill. “Recycling would address one of the challenges raised by the resurgence of nuclear energy, retrieving large amounts of energy from used fuel and greatly reducing radioactive waste.”

The ANS awarded Boardman the Walker Lee Cisler Medal today during the organization’s annual conference in Atlanta, Ga. The ANS is a not-for-profit, international scientific and educational organization covering nuclear science and technology. The Cisler Medal recognizes leadership in the field of “fast reactor” technology and its potential applications for power generation.

GEH’s proposed recycling center is being evaluated by the U.S. Department of Energy and Congress as the government determines the country’s long-term strategy for spent nuclear fuel.

Currently, spent nuclear fuel is safely stored in special pools or in dry casks installed at nuclear power plant sites, a practice adopted by the U.S. government. Approximately 95% of the material in spent nuclear fuel from light water reactors is

considered untapped energy that could be used to generate electricity in different kinds of nuclear reactors.

GEH's proposed ARC system would permit much of this spent fuel to be recycled in the PRISM reactor to generate additional electricity for consumers. As a result, utilities also would be able to reduce the amount of spent fuel that needs to be stored on-site.

Boardman, who retired from GE in 2001, worked on GE's advanced nuclear energy technology programs and led the development of GE's fast-breeder reactor concept. During his tenure, he served as manager of systems and plant engineering for the PRISM/Advanced Liquid Metal Reactor (ALMR) and S-PRISM plant designs.

During a career that began in 1964, he contributed to the conception and implementation of evolutionary passive safety features integrated into GEH's current Generation III ABWR and Generation III+ ESBWR reactor designs—even as he also looked to the development of Generation IV reactor technology.

Following his retirement, Boardman continued working with numerous government and nuclear energy organizations to help spearhead the continued research and development of the PRISM and other Generation IV reactor concepts.

The PRISM, which would use liquid sodium as the primary coolant instead of water, is designed to potentially increase the fuel use of nuclear power plants 20-fold.

“We are proud that the ANS has selected Charles Boardman for the Cislser Medal in recognition of the contributions he has made to the field of advanced nuclear reactor technology,” said Jack Fuller, GEH's President and CEO. “Charles Boardman has contributed to GE's legacy of championing crucial energy research as the world seeks environmentally sound, baseload sources of energy in the years to come.”

Boardman's work has led to additional study of the potential for dual-purpose plants for both nuclear energy and desalination, along with ABWR design developments, gas-cooled reactors and overall plant-optimization studies.

The resident of Saratoga, Calif., holds 13 patents related to the design of containments, decay heat removal, power generation and sodium-heated generators. Boardman has written a vast array of technical papers and has been a frequent expert speaker on advanced nuclear energy topics.

John Sackett, a former director with the Argonne National Laboratory, worked closely with Boardman in the development of GE's ALMR and subsequent S-PRISM designs.

"(Charles) was clearly the key individual in translating information... from the R&D community into practical application..." Sackett wrote in support of Boardman's award nomination. "The PRISM design ... is a safe, economically competitive system which will be important to the nation as we move forward."

About GE Hitachi Nuclear Energy

Based in Wilmington, N.C., GEH is a world-leading provider of advanced reactors and nuclear services. Established in June 2007, GEH is a global nuclear alliance created by GE and Hitachi to serve the global nuclear industry. The nuclear alliance executes a single, strategic vision to create a broader portfolio of solutions, expanding its capabilities for new reactor and service opportunities. The alliance offers customers around the world the technological leadership required to effectively enhance reactor performance, power output and safety.

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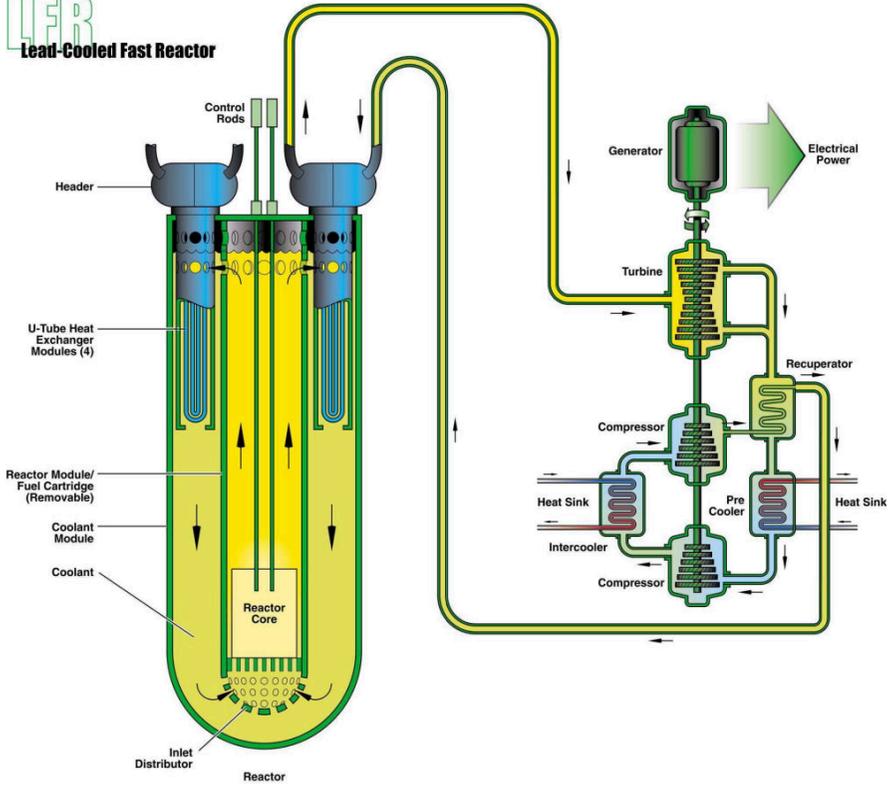
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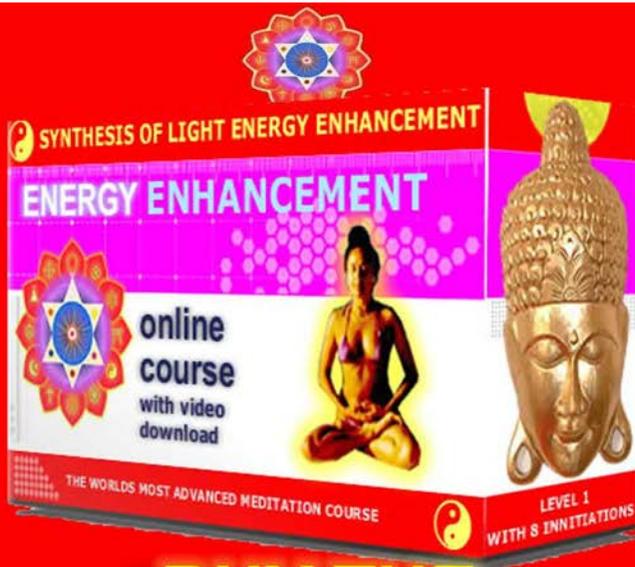
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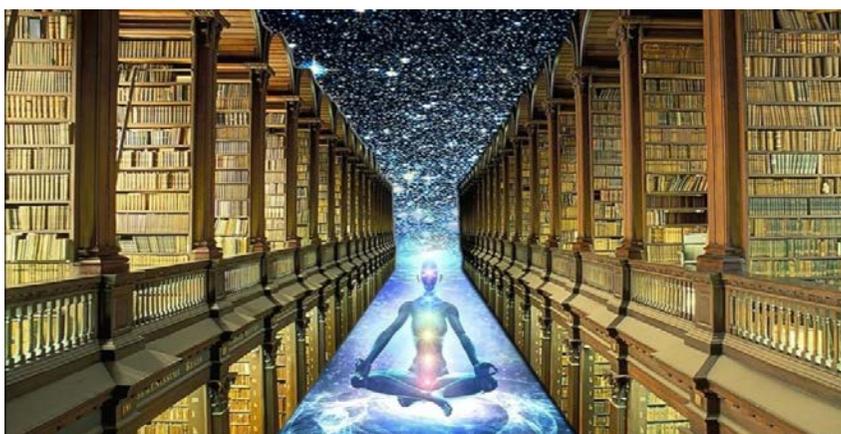
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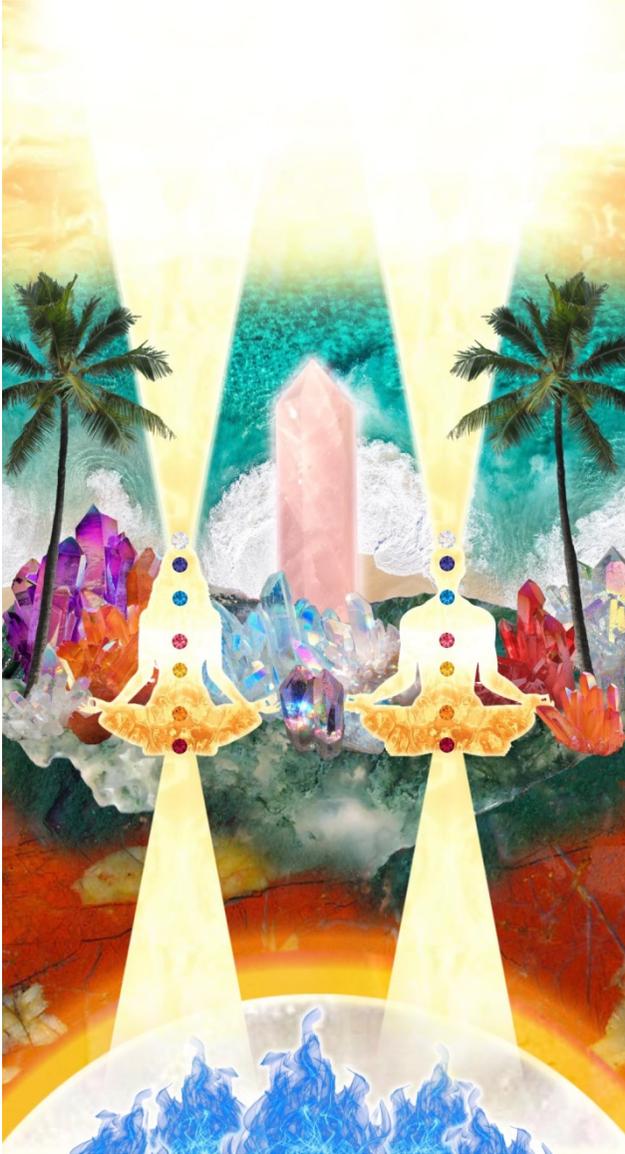
He said, "I spent all my previous lifetimes making Guinness. Now in this lifetime I am drinking all the Guinness!"

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REMEMBER, THIS COMMENTARY COMES ONLY FROM MY OWN MEDITATIONAL EXPERIENCE
ENJOY!!**

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- Whirling Dervishes
- The Light of the Soul
- Sphinx or Cathedral
- Zen Circle
- Alchemy
- VTIKOL
- Serpent
- The Asimbokarana and Axis Mundi
- The Myth of King Arthur
- The Chakras
- Kundalini Energy
- Tantra and Sex
- Philosophers Stone

Human Evolution and the Chakras
Sexual Abuse and Rape
The Heart Chakra and Society
Crown Chakra Connections
Then There is Anger
Jealous People are called Morlocks
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ENERGY ENHANCEMENT TWO

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BLOCKAGES IN CHAKRAS ABOVE THE HEAD CREATE PSYCHOPATHY.

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DVD 1 - KUNDALINI CHAKRA MEDITATION

HEART SUTRA – HIGHEST HEART OF WISDOM MEDITATION

DVD 1:

KUNDALINI CHAKRA MEDITATION

Swami Satgurunand gives the introductory talk for the Guided Meditation to access Kundalini Chakra, described by Alchemical VITRIOL – Visita Interiora Terrae Rectificando Invenies Occultum Lapidem, The Philosophers Stone which transmutes Base Metal or Blockages of the Base Chakra into Gold, the pure Spiritual Gold of the Crown Chakra in order to allow Kundalini Energy and Enlightenment. This Ancient Meditation is a part of Powerful Kriya Yoga and the Kundalini Kriyas.

Swami Satgurunand has been teaching this Meditation to many students over the years and every one has had Shaktipat and increased Kundalini experiences together with Energy and Peace.

Now it is available to everyone who sees this Video...

HEART SUTRA - HIGHEST HEART OF WISDOM MEDITATION

Swami Satgurunand gives a talk on the Heart Sutra, an Ancient discourse Given by the Buddha about Enlightenment through Meditation. "All Enlightened Sages for Thousands of Years Live From the Highest Heart of Wisdom and are granted all over the World, now and for Thousands of Years to remove negative energies and arouse the Energies of Enlightenment.

This DVD talk is an adjunct to the Introductory Talk for the Guided Meditation to Access Higher Wisdom Chakras above the Head connecting you with the Higher Energies of Enlightenment, Nirvana, Soul – Love, Wisdom, Integration and Peace, which talk is available on DVD 2.

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Duration: 90 Min. Approximately

Energy Enhancement DVD 1

KUNDALINI CHAKRA MEDITATION
and Heart Sutra - Highest Heart Of Wisdom Meditation

LEARN...
The Secrets of Kundalini Chakra
The Alchemical Secrets of VITRIOL
Ancient Techniques to Access Kundalini Energy

Energy Enhancement Meditation DVD 1

* ENERGY ENHANCEMENT MEDITATION DVD 1...
Guided Meditation to Access Kundalini Chakra,
VITRIOL, The Philosopher's Stone, Kriya Yoga and
the Kundalini Kriyas.

Heart Sutra, All Enlightened Sages for Thousands
of Years Live From the Highest Heart of Wisdom.

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DVD 2 - HIGHEST HEART OF GENIUS WISDOM MEDITATION

DVD 2:

HIGHEST HEART OF GENIUS WISDOM MEDITATION

Swami Satchidananda gives the Introductory Talk for the Guided Meditation to Access Higher Wisdom Chakras above the Head connecting you with the Higher Energies of Nirvana, God – Love, Wisdom, Genius, Integration and Peace and for the Creation of the Antahkarana, a Higher State Connection with the Higher Energies of Enlightenment, Nirvana, God – Love, Wisdom, Integration and Peace.

This Ancient Meditation is a part of Powerful Kriya Yoga and the Kundalini Kriyas and also forms the Basis of Surya Yoga. As the Higher Energies enter into the Brain through the Crown Chakra, like the Sun, they energize all the Glands and Higher faculties of Man leading towards Genius and Enlightenment.

The Second talk is how this Guided Meditation is given in Secrets of Shakespeare, The Holy Trinity, The Holy Grail, and the Sanskrit meaning of Satchidananda.

On DVD 1, Swami Satchidananda's talk on the Heart Sutra Gautama Buddha says, "All Enlightened Siddhas for Thousands of Years Live From the Highest Heart of Wisdom." The Heart Sutra is Chanted now and for Thousands of Years to remove Negative Energies and create Enlightenment.

Swami Satchidananda has been teaching this Meditation to many students over the years and every one has had Shaktipat and increased Kundalini experiences of Chit Shakti together with increased feelings of Intelligence, Genius, Energy and Peace.

Now it is available to everyone who sees this Video...
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Duration: 95 Min. Approximately

Energy Enhancement DVD 2

HIGHEST HEART OF GENIUS WISDOM MEDITATION

LEARN:
Supra Galactic Kundalini Energy
The Kundalini Sirius Connection
Secrets of the Holy Grail

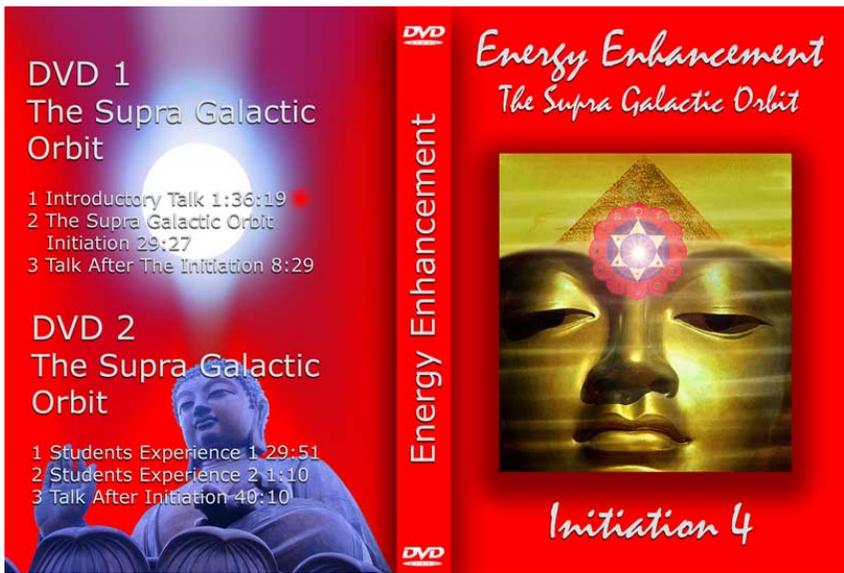
Energy Enhancement Meditation DVD 2

Guided Meditation to Access Higher Wisdom Chakras above the Head connecting you with the Higher Energies of Nirvana, God – Love, Wisdom, Genius, Integration and Peace and the Creation of the Antahkarana.

How this Guided Meditation is given in Secrets of Shakespeare, The Holy Trinity, The Holy Grail and the Sanskrit meaning of Satchidananda.

Swami Satchidananda has been teaching this Meditation to many students over the years and every one has had Shaktipat and increased Kundalini experiences of Chit Shakti together with increased feelings of Intelligence, Genius, Energy and Peace.

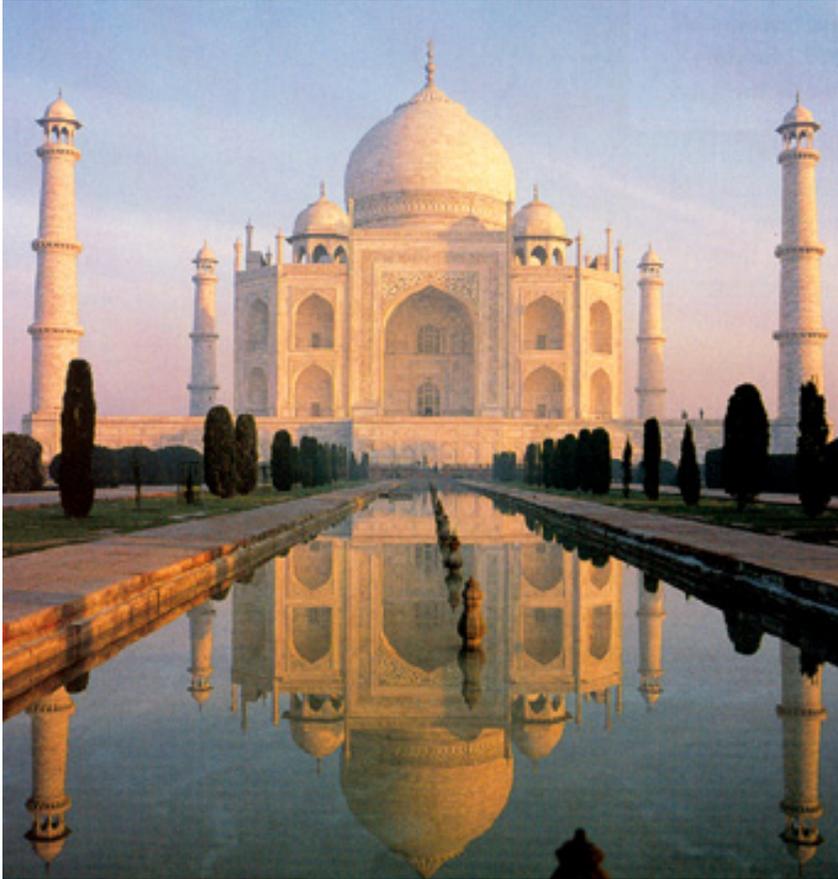
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JEAN, NUCLEAR ENGINEER, FROM SEPTEMBER 2005 ENERGY
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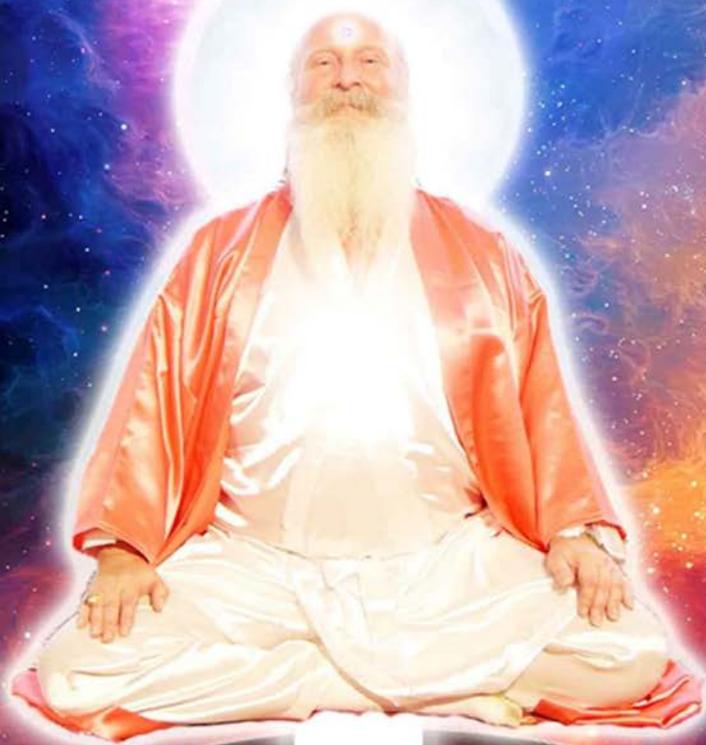
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LEVEL ONE

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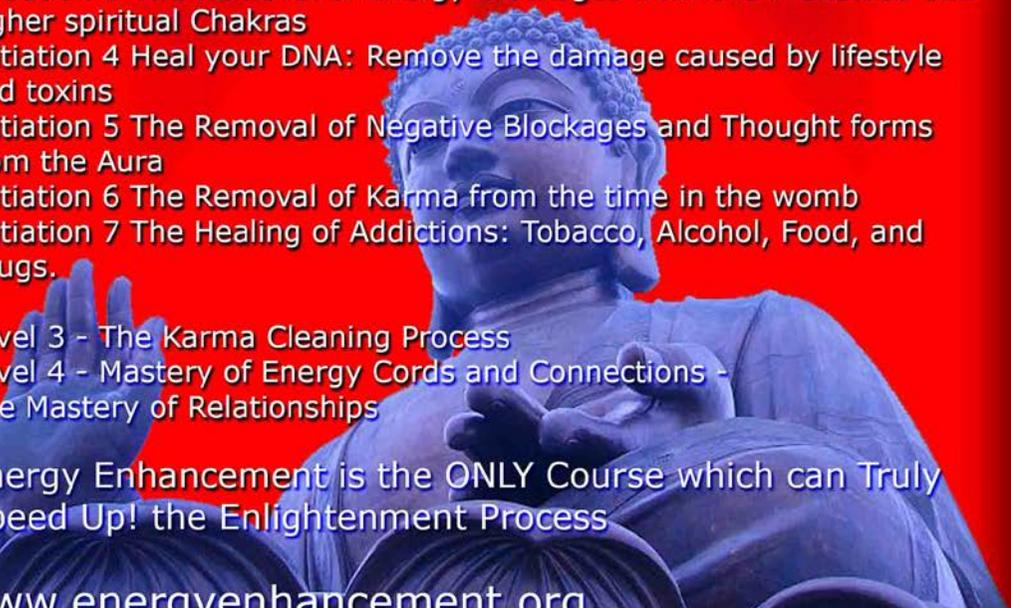
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Initiation 4 Accessing the Universal Energy Source: Macrocosmic Orbit, The Energy Enhancement Supra Galactic Orbit, Advanced Kundalini Kriyas.
Initiation 5 Open Your Third Eye. Project Energy from Ajna Chakra. Ground Toxins in Food: Re-awakening our psychic ability to detect poisons. Removing Blockages.
Initiation 6 Antahkarana Power Tower Protection
Initiation 7 Pyramid Protection
Initiation 8 The Merkaba Protection

Level 2

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- Initiation 1 The Removal of Energy Blockages and Thought forms from the Antahkarana Infinity of Chakras
Initiation 2 The Removal of Energy Blockages in the Body: Healing disease and pain
Initiation 3 The Removal of Energy Blockages from the 7 Chakras and higher spiritual Chakras
Initiation 4 Heal your DNA: Remove the damage caused by lifestyle and toxins
Initiation 5 The Removal of Negative Blockages and Thought forms from the Aura
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LEVEL TWO



REMOVE

ENERGY BLOCKAGES

ENERGY ENHANCEMENT LEVEL TWO

REMOVE ENERGY BLOCKAGES

Learn the "Energy Enhancement Anti Energy Blockage Hack Technique" and Free Your Mind Once and for All.

Why has this Energy Blockage predator taken over in the fashion that you're describing, Don Juan?" I asked. "There must be a logical explanation."

"There is an explanation," don Juan replied, "which is the simplest explanation in the world. They took over because we are food for them, and they squeeze us mercilessly because we are their sustenance. Just as we rear chickens in chicken coops, gallineros, the predators rear us in human coops, humaneros. Therefore, their food is always available to them."

Don Juan had a broad smile on his face. He was as pleased as punch. He explained that sorcerers see infant human beings as strange, luminous balls of energy covered from the top to the bottom with a glowing coat something like a plastic cover that is adjusted tightly over their cocoon of energy. He said that that glowing coat of awareness was what the predators consumed, and that when a human being reached adulthood, all that was left of that glowing coat of awareness was a narrow fringe that went from the ground to the top of the toes.

If we consider a human being as containing seven parallel chakra processors within the body and an infinity of parallel chakra processors above the head and below the base, connecting us to the Universe, then the more of these parallel chakra processors we can access, the more intelligence we have - What stops the access to these parallel chakra processors is Energy Blockages.

We need to learn how to "Hack" these Energy Blockages to remove them so we can access our native genius. The Geni being the Soul Chakra, the first Chakra above the head.

Yet as we remove more of the energy blockages and access many more chakras, even more intelligence is possible!!

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ENERGY ENHANCEMENT LEVEL 3



KARMA CLEARING PROCESS

ENERGY ENHANCEMENT

ENERGY ENHANCEMENT LEVEL 3

THE REMOVAL OF EVEN DEEPER ENERGY BLOCKAGES

THE REMOVAL OF KARMA

"Traditional forms of meditation are designed to fail!!"

Remove Deep Energy Blockage Forces - The Matrix And Antahkarana Hyperdimensional Predators are just some of the Energy Blockages completely vampirising your energy, blocking your intellect, sabotaging your life and indeed your health.

YES, WITH ENERGY ENHANCEMENT, LEARN HOW TO REMOVE ALL YOUR ENERGY BLOCKAGE KARMA!!

REMOVE ALL YOUR BAD LUCK AND TROUBLE

REMOVE ALL YOUR INNER SABOTAGE, ATTITUDES, HABITS WHICH PREVENT SUCCESS IN LIFE

YES, EACH ENERGY BLOCKAGE IS THIS LIFE AND PAST LIFE KARMA. ONCE KARMA IS REMOVED THEN IT IS EASY TO FIND YOUR DHARMA, YOUR SOUL PATH, "THE PATH WITH HEART" - REMOVE KARMA, FOLLOW DHARMA.

THE KARMA CLEARING PROCESS - REMOVING EVEN DEEPER BLOCKAGES

"Waste no more time arguing what a good person should be.. Be One" - Marcus Aurelius

KARMA CLEANING PROCESS, CLEAN THE KARMA FROM PAST LIVES, CLEAN THE KARMA FROM YOUR FUTURE LIFE, CLEAN THE KARMA FROM YOUR FUTURE LIFETIMES, SOUL FRAGMENTATION INTEGRATION AND RETRIEVAL.

HOW TO STOP PSYCHOPATHIC ENERGY VAMPIRES, INTEGRATE INNER CHILDREN, HEAL AND INTEGRATE SELFISH EGO SUB PERSONALITIES, LIFE DESTROYING STRATEGIES, THE ALOOF, THE INTERROGATOR, THE VIOLATOR, THE SELFISH COMPETITIVE STAR, THE VAMP OR DON JUAN, THE PLEASER, THE BLAMER, THE CRITIC, THE KING, THE SELF DESTRUCTOR, REMOVE ALL THE DESTRUCTIVE VOWS FROM THIS AND PAST LIFETIMES, THE CREATION OF SELF LOVE, LOVE AND SERVICE.

"REMOVING ALL YOUR ENERGY BLOCKAGES IS A REALLY GOOD THING TO DO" - SATCHIDANAND

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ENERGY ENHANCEMENT

LEVEL 4



MASTERY OF RELATIONSHIPS

LEVEL 4 MASTERY OF RELATIONSHIPS

MASTER THE PSYCHIC ENERGY CONNECTION BETWEEN YOU AND ALL PEOPLE, CREATE INCREDIBLE RELATIONSHIPS - THE KARMA CLEARING PROCESS WITH ALL YOUR RELATIONSHIPS, FRIENDS, FAMILY, MOTHER AND FATHER, REMOVE BLOCKAGES FROM FRIENDS AND FAMILY, HEAL BEREAVEMENT, IMPOTENCE, CLEAN THE TIES WHICH BIND, THE HIGHEST HEART, THE MASTERY OF ADDICTIONS - DRUGS, ALCOHOL, TOBACCO, SEX, FOOD, POWER, MONEY, BUDDHIST NON - ATTACHMENT, THE MASTERY OF ATTACHMENT - DEPENDENT ATTACHMENT, PARASITIC VAMPIRE ATTACHMENT, SYMBIOTIC ATTACHMENT, ENLIGHTENED ATTACHMENT, THE SOUL CONNECTION, HEAL THE WORLD. BECOME A MASTER, A MERLIN, A JEDI KNIGHT, A WHITE MAGICIAN.

WE ARE AFFECTED BY ENERGY BLOCKAGES IN THE PEOPLE WHO CONNECT TO US - LEARN HOW TO REMOVE ENERGY BLOCKAGES AT THE OTHER END OF YOUR ENERGY CONNECTIONS IN OTHER PEOPLE. LEARN HOW TO AUGMENT YOUR PSYCHIC TALENT BODY WITH ALCHEMICAL GOLD - THE NEW METHOD OF ENERGY ENHANCEMENT EVOLUTION!!

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THE MASTERY OF VAMPIRE ENERGY CONNECTIONS - ENERGY CORDS

THE REMOVAL OF EVEN THE DEEPEST ENERGY BLOCKAGES

"Traditional forms of meditation are designed to fail!!"

"WE PUT BACK WHAT THE OTHERS TOOK OUT!!"

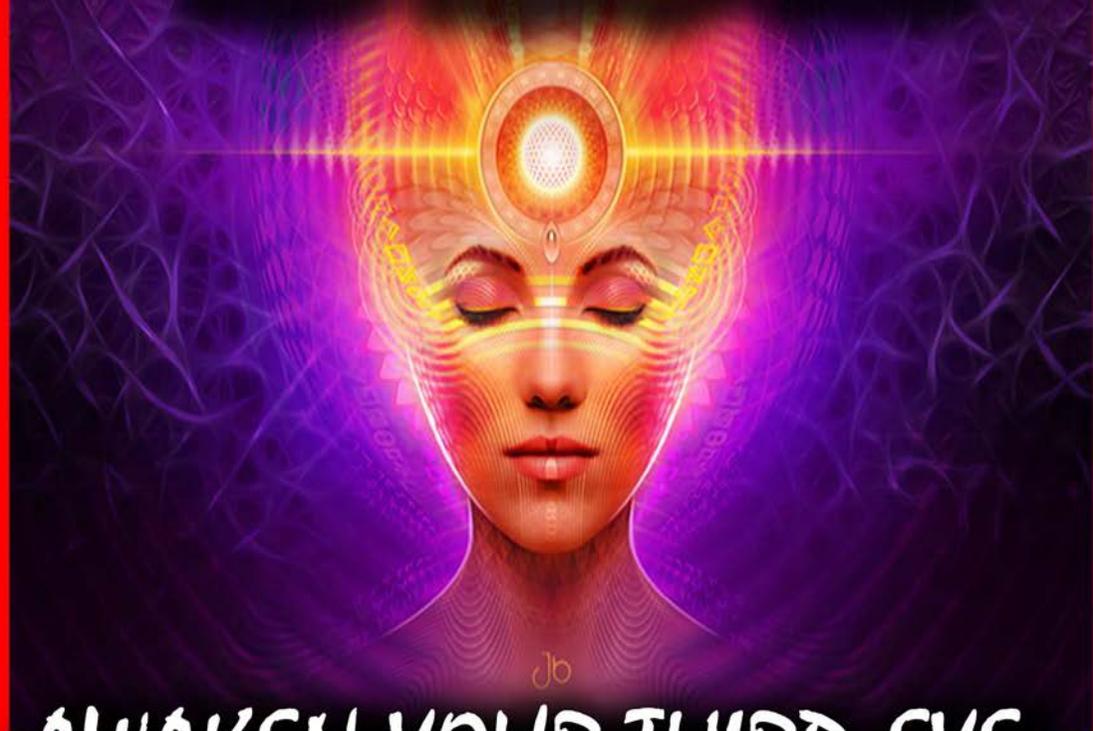
THE MASTERY OF ENERGY CONNECTIONS BETWEEN PEOPLE

THE REMOVAL OF ENERGY CONNECTIONS TO BAD PEOPLE WHO POISON AND SUCK YOUR ENERGIES - THE ABILITY TO CUT BAD ENERGY CONNECTIONS TO, "TO SEAL THE DOOR WHERE EVIL DWELLS"

THE ATTAINMENT OF BUDDHIST "NON-ATTACHMENT"
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"Now!! Here Are Complete Instructions on Enlightenment" After you have tried all the bad things and found they do not work - Here are complete instructions on how to attain your Infinite Peace. Yoga comes from Yoke. This Yoking or Union with the Higher self and the chakras above the head is Enlightenment.

By the loosening of the cause (of the bondage of mind to body) and by knowledge of the procedure of the mind-stuff's functioning, entering another's body is accomplished.

THE WHOLE WORLD IS CONTROLLED BY MEDITATION..

He who, due to his perfect discrimination - dis-crime-ination or sanskrit, Viveka, is the ability to transmute energy blockages and as they transmute and ground, so they go through the symptoms of the Gunas from Tamas, to Rajas, to Sattvic as the Negative Karmic Mass is grounded - The sword of discrimination is the ANTAHKARANA - the energy connection between all the chakras above the head through the body and below the base chakra to below the Center of the Earth, which feeds energy from higher to lower levels of the hierarchy - this discriminative energy blockage transmuting flow of energy if maintained is called Dharma Mega Samadhi.

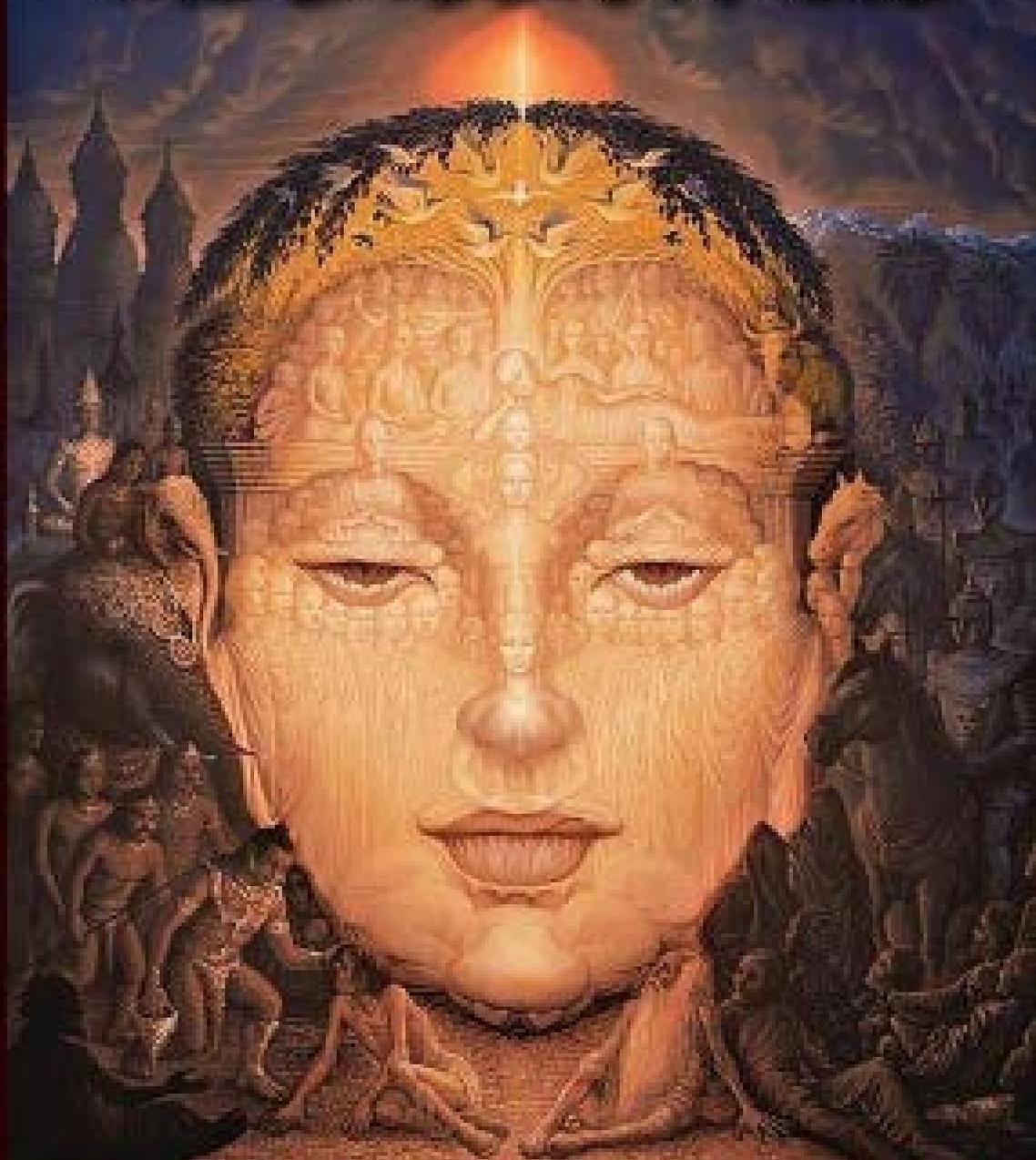
The meaning of dharma includes goodness - next to Godness - virtue, justice, law, duty, morality, religion, religious merit, and steadfast decree - all symptoms of being Soul Infused.

Dharma is the energy of the Soul!!

GOODNESS AND MERCY SHALL FOLLOW ME ALL THE DAYS OF MY LIFE AND I SHALL DWELL IN THE HOUSE OF THE LORD FOREVER..

"WHEN ALL ENERGY BLOCKAGES ARE GONE, ENLIGHTENMENT IS SURE TO FOLLOW" - Satchidanand

VIMALAKIRTI SUTRA -THE BUDDHA FIELD



SATCHIDANAND

ENERGY ENHANCEMENT

Vimalakirti Sutra - The Buddhafield

Buddhas, Bodhisattvas, Aryasravakas, and Pratyekabuddhas conquering demons, natural spiritual benefactors of all living beings, free from impurities, expert in knowing the spiritual faculties of all living beings, high resolve as hard as diamond, unbreakable in their faith in Buddha, Dharma and Sangha, they showered forth the rain of ambrosia that is released by the light rays of the jewel of the Dharma, which shines everywhere.

The Purification - the Removal of Energy Blockages - And the Augmentation of Psychic Powers - Caused by the Buddhafield

Inconceivable Skill in Enlightenment Liberative Technique, Dharma, Connection with the Infinite Chakras above the Head - Gnosis, conquered all demons, transcendence of wisdom, tolerance and self-control, respected by Indra, Brahma, and all the Lokapalas

Thereby, thirty-two thousand living beings purified their immaculate, undistorted Dharma-eye in regard to all things.

The eight thousand bhikshus were liberated from their mental defilements, attaining the state of non-grasping.

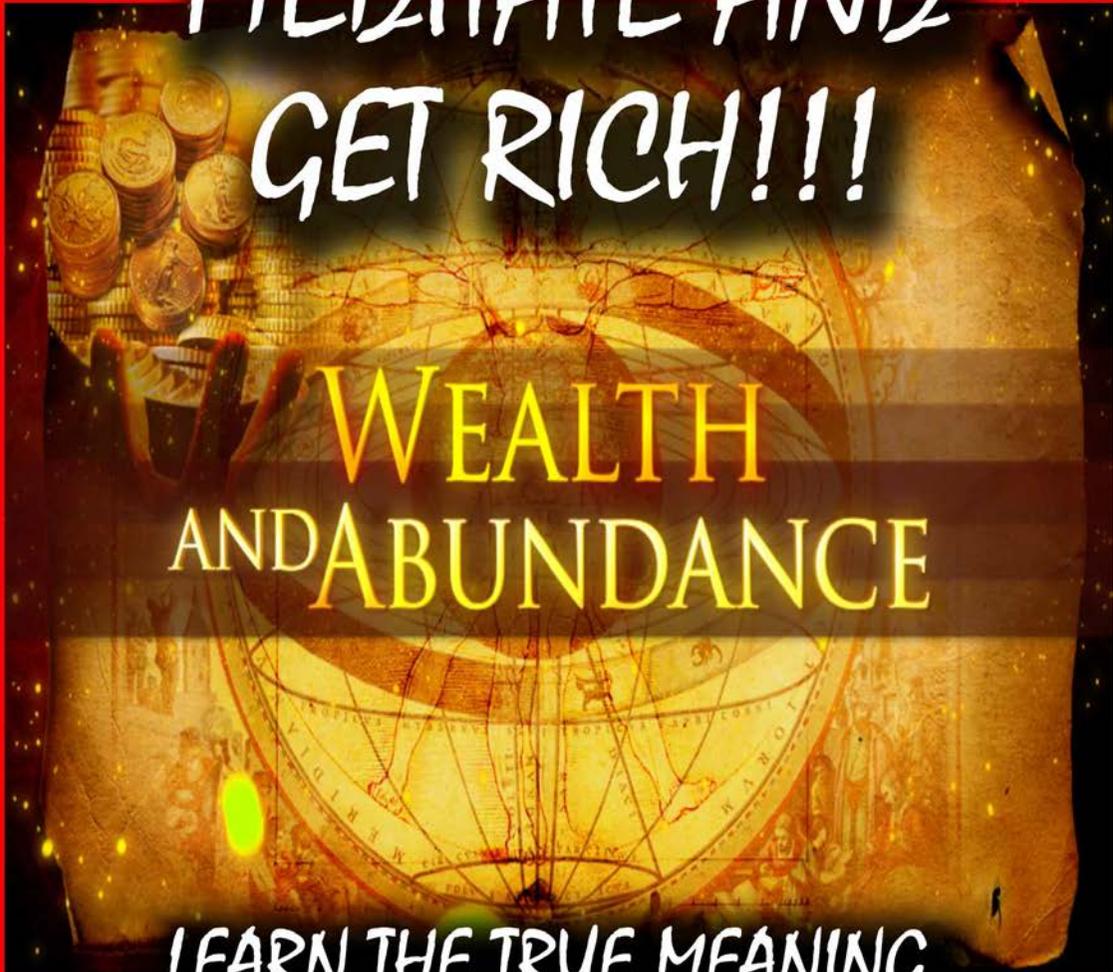
And the eighty-four thousand living beings who were devoted to the grandeur of the buddhafield, having understood that all things are by nature but magical creations, all conceived in their own minds the spirit of unexcelled, totally perfect enlightenment.

A Zen Master saw a child with a broken arm sitting miserably by the side of the road. This guy was so miserable that the Zen Master just knew he was impervious to being cheered up, To accepting good advice, to being told that, "Everything changes". So he took an iron bar and with it he broke his own arm. Sitting down by the young child he said, "Now we can talk!!"

"The Dharma - The Path of the Soul Chakra - The First Chakra above the Head - permeates evenly all things, because all are included in the ultimate realm. It conforms to reality by means of the process of nonconformity. It abides at the reality-limit, for it is utterly without fluctuation. It is immovable, because it is independent of the six objects of sense. It is without coming and going, for it never stands still. It is comprised by voidness, emptiness, a vibration so high that it is not gross like matter, or emotion, or mind, it is remarkable through signlessness, and is free of presumption and repudiation, because of wishlessness. It is without establishment and rejection, without birth or destruction. It is without any fundamental consciousness, transcending the range of eye, ear, nose, tongue, body, and thought. It is without highness and lowness. It abides without movement or activity.

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**ENERGY
ENHANCEMENT
MEDITATE AND
GET RICH!!!**



**WEALTH
AND ABUNDANCE**

**LEARN THE TRUE MEANING
OF THE LAW OF ATTRACTION,
ABUNDANCE, RICHNESS AND WEALTH**

MEDITATE AND GET RICH!!!

The Human Right to Life surely includes a Rich, Wealthy life. Health, Housing, Air Conditioning, Education, Transport, Entertainment, Books, Pure Food, Water, Environment.
So that we can choose what to work at. So that we can choose to work at The Right Hand Path of Meditation leading to Enlightenment.

Simple, Easy Effective Techniques, Vouchsafed from a Mystical Past lie at the Heart of Alchemical Transmutation of Internal Dragons to Man Up!! and Release the Wellsprings of Energy, Wealth and Internal and External Gold!!

We have all seen "The Secret"

We have all read Napoleon Hill's, "Think and Grow Rich".

But one of the Forgotten Secrets of Wealth and Richness has Traditionally been the Transmutation of Lead into Gold.

The Ancient Secrets of Alchemy!!

And what we need now is the Modern Upgrade of the Secrets of Alchemy brought into the Modern Age.

As Jung has brought Alchemy and Archetypes into Psychology, so Energy Enhancement has brought Alchemy and Archetypes into Wealth and Self Actualisation.

Get the Gold!!

Understand the Ancient Formulas of Alchemy to release Sources of Internal and External Wealth!!

Get the Gold!!

Get the Philosophers Stone which Transmutes All Base Metal into Pure Alchemical Gold!!

There are Powers inside you that once Released, Paradigms Transmuted, Blockages Removed, will enable you to Access your true Potential.

These Ancient Techniques called Alchemy will Truly Release your Beast and Allow Incredible Success in Any Field of Life.

The Secret of Alchemy lies in the Transmutation of Trauma which lies at the Base of all Blocks and Bad Habits.

Trauma creates the Dragon of Fear which in all Ancient Mythical Stories is Killed by the Hero in Order to Rescue and Release the Princess..... and Get the Gold...

After reading this, in lieu of its recommendations which may take a little while to percolate through the Archetypal Mind of humanity, my recommendation is to teach Energy Enhancement Advanced Meditation Techniques..

To achieve True Wealth.. the Ultimate Truth, and Freedom... Enlightenment!!

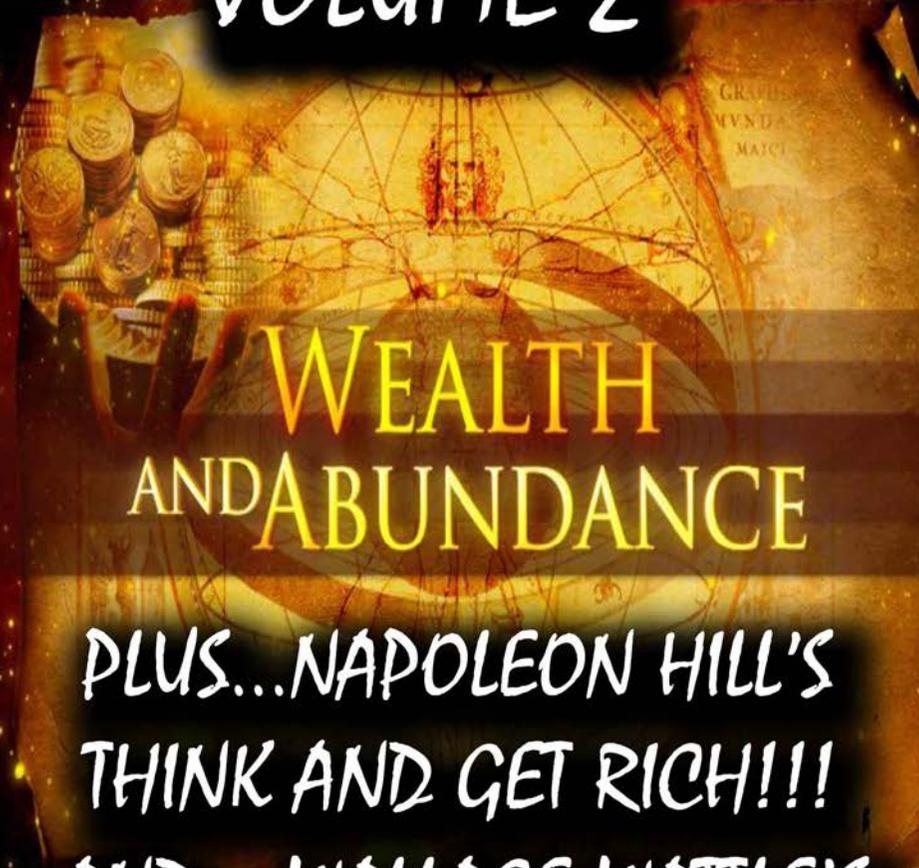
ENLIGHTENMENT IS AVAILABLE FOR EVERYONE

INCREASING WEALTH WILL SPEED UP THE PROCESS OF EVOLUTION AND ENLIGHTENMENT FOR ALL

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ENERGY ENHANCEMENT MEDITATE AND GET RICH VOLUME 2



WEALTH AND ABUNDANCE

PLUS... NAPOLEON HILL'S
THINK AND GET RICH!!!
AND... WALLACE WATTLE'S
THE SCIENCE OF GETTING RICH
BY SATCHIDANAND

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MEDITATE AND GET RICH VOL.2

YOUR RICHNESS SEED IS A THOUGHTFORM!!

With regard to becoming rich, becoming strong, any mortal thing you want to be – All these things and more are thoughtforms.

They are thoughtform seeds.

And Napoleon Hill talks about growing these thoughtform seeds, actualising these thoughtform seeds, so that they grown like Acorns to become the great Oak trees they were destined to become - and he gives the formula for this Richness tree to come to fruition.

That you actually become rich!

And Napoleon Hill gives in this book these methods – which suit the natural competents, but require everything from those not naturally competent, including a lot of time..

FAITH, AUTO SUGGESTION, IMAGINATION, DESIRE, DECISION, PERSISTANCE, SEX, THE SUBCONSCIOUS MIND, THE BRAIN, THE SIXTH SENSE, HOW TO OUTWIT THE SIX GHOSTS OF FEAR

NOW, HOW WOULD YOU LIKE TO GROW YOUR PSYCHIC OAK TREE IN DOUBLE QUICK TIME?

HOW WOULD YOU LIKE TO SPEED UP THE PROCESS?

The thing about these Thoughtform Seeds is that they are psychic seeds.

These Thoughtform Seeds do not need real Earth, Water, Sunlight and Carbon Dioxide to grow.

No!

These Thoughtform Seeds need Psychic Energy to Grow.

Most Richness and Wealth Courses teach very beginners techniques.

We are taught the Ancient Buddhist Technique of Metta Bhavana – Gratitude - to Open the Heart.

We are taught the Ancient Yogic Technique of Repetition – of Mantra and Visualisation to Life Stream what we want in the Present tense as though we already have it

So we write down what we want on sheets of paper, read them out into audio files, listen to the files constantly, so that we live in our Matrix, not truly alive so as to enter the prayers into our conscious minds so that with years of repetition the thoughtform seeds might grow, clothe themselves in psychic matter and enter in to the Universal Sub-conscious mind and we might actually become rich and everything work out just as we wish.

So, why does it take so much effort by Mantra to become Rich?

The answer is Energy Blockages which stop our connection with the infinite energies of the Earth and the Central Spiritual Sun and which block our little richness thoughtform from the energies that would make it grow Superfast!

As I said, Mantra is a very beginners technique. There are Ancient Techniques of the Sidars which quickly develop the Psychic Powers to get what you want quickly and easily.

Everyone who takes the Energy Enhancement Course gets these psychic powers.

The power to connect with the fountain of kundalini energy from the Earth.

The power to connect with Infinite Spiritual Energy which descends from the Central Spiritual Sun.

The most powerful Technique is that of Meditation developing quickly with Energy Enhancement Initiations into Samadhi and Samyama, talked about in the Ancient – 5000 years old - Yoga Book, the Yoga Sutras of Patanjali.

Everyone knows that Meditation is the best, most ancient, fastest and efficient technique to gain Psychic Powers,

There is a whole chapter in the Yoga Sutras of Patanjali on the use of Samyama to gain all the Psychic Powers – gain immense riches, remove all our vows of poverty from our past lifetimes as monks, remove all bad luck and karma, remove everything holding you back, and attain Enlightenment the goal of All our Past Lifetimes.

The Energy Enhancement Video Meditation Course in Four Levels, and twenty eight Initiations

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SUPER ENERGY

and

SACRED SYMBOLS



*for Perfect Wisdom
Enlightenment*

ENERGY ENHANCEMENT

Ancient Sacred Symbols are Guided Meditations indicating How to get into Alignment with a Stream of Energy from Kundalini Chakra in the Earth's Center To the Central Spiritual Sun "Brighter than 10,000 Suns" in the Center of the Universe.

Learn Secrets of the Kundalini Kriyas...

- * The Yin Yang
- * Om or Amen
- * Antahkarana
- * Squaring the Circle
- * The Holy Grail
- * The DNA Spiral
- * Caduceus
- * The Pyramid
- * The Ankh
- * Whirling Dervishes
- * The Light of the Soul
- * Sphinx or Centaur
- * Zen Circle
- * Alchemy
- * VITRIOL
- * Omphallus
- * The Antahkarana Axis Mundi
- * The Myth of King Arthur
- * The Chakras
- * Kundalini Energy
- * Tantra and Sex
- * Philosophers Stone

Human Evolution and the Chakras

Sexual Abuse and Rape

The Heart Chakra and Society

Crown Chakra Connections

Then There is Anger

Jealous People are called Monkeys

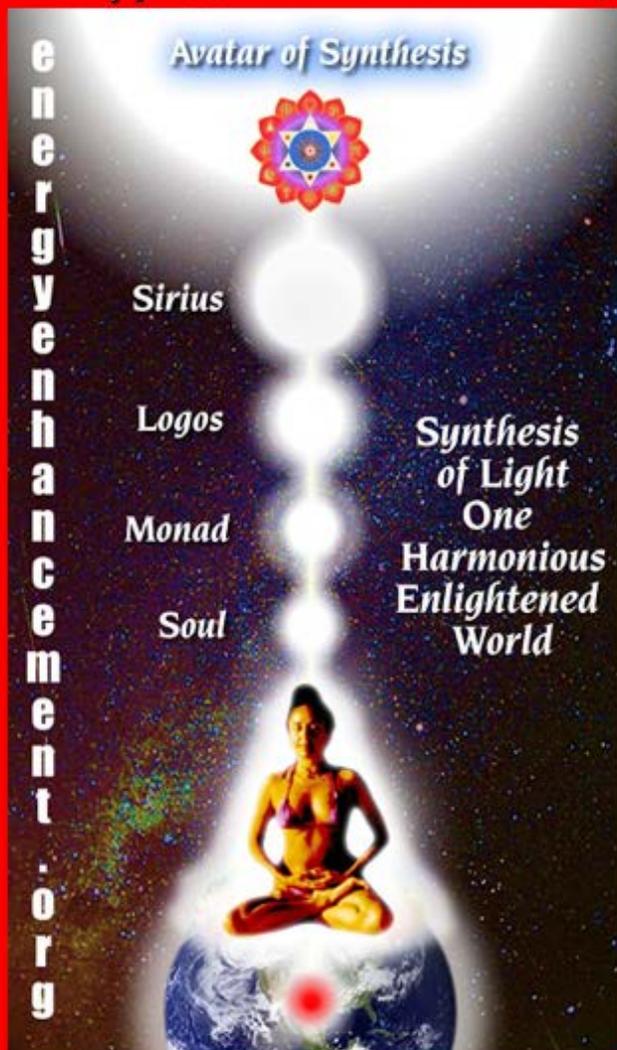
What are the Strategies of the Energy Vampire?

Swami Satchidanand has taught many Students Ancient yet Powerful methods to Access More Wisdom, More Kundalini, More Clarity, More Intelligence, More Energy using Energy Enhancement Techniques available Live or On Video together with many Talks, Books, Videos.

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ENERGY ENHANCEMENT



LINK INTO INFINITE CHAKRA ENERGY
AND ELIMINATE ENERGY BLOCKAGES

ENERGY ENHANCEMENT ONE

ENERGY ENHANCEMENT GUIDED MEDITATIONS TEACH HOW TO GET INTO ALIGNMENT WITH A COLUMN OF ENERGY FROM EARTH TO HEAVEN, FROM KUNDALINI CHAKRA IN THE CENTER OF THE EARTH TO THE CHAKRA IN THE CENTER OF THE UNIVERSE, THE SOUL CHAKRA.

NOW, ENERGY ENHANCEMENT TO ELIMINATE THE ENERGY BLOCKAGES WHICH STOP THE FLOW OF ENERGY.

ACCESS THE CHAKRAS ABOVE THE HEAD WITH MONADIC INFUSION AND CONNECTION WITH THE AVATAR OF SYNTHESIS.

ENERGY ENHANCEMENT AND ANCIENT MYTH AND THE HERCULES LABOUR OF THE AUGEAN STABLES.

ENERGY CIRCULATION AND THE GROUNDING OF NEGATIVE ENERGIES.

ENERGY ENHANCEMENT MEDITATION AND THE KUNDALINI KRIYAS OF KRIYA YOGA.

ENERGY ENHANCEMENT AND VITRIOL - THE FIRST FORMULA OF ALCHEMY AND THE REMOVAL OF FEAR.

THE SECRET OF THE PHILOSOPHERS STONE WHICH TRANSMUTES BASE METAL - ENERGY BLOCKAGE IMPLANTS - INTO PURE GOLDEN SPIRITUAL ENERGY AND ILLUMINATION.

THE REMOVAL OF BLOCKAGES FROM THE ANTAHKARANA, THE CHAKRAS IN THE BODY. FROM CHAKRAS BELOW THE BASE CHAKRA AND ABOVE THE HEAD CHAKRAS. THE REMOVAL OF BLOCKAGES FROM PARTS OF THE BODY. THE REMOVAL OF BLOCKAGES FROM THE TIMELINE BY THE ENERGY ENHANCEMENT SEVEN STEP PROCESS.

ENERGY ENHANCEMENT AND THE ZEN STORY OF HYAKUJO, A ZEN STORY OF THE ANTAHKARANA AND THE HIGHER SELF.

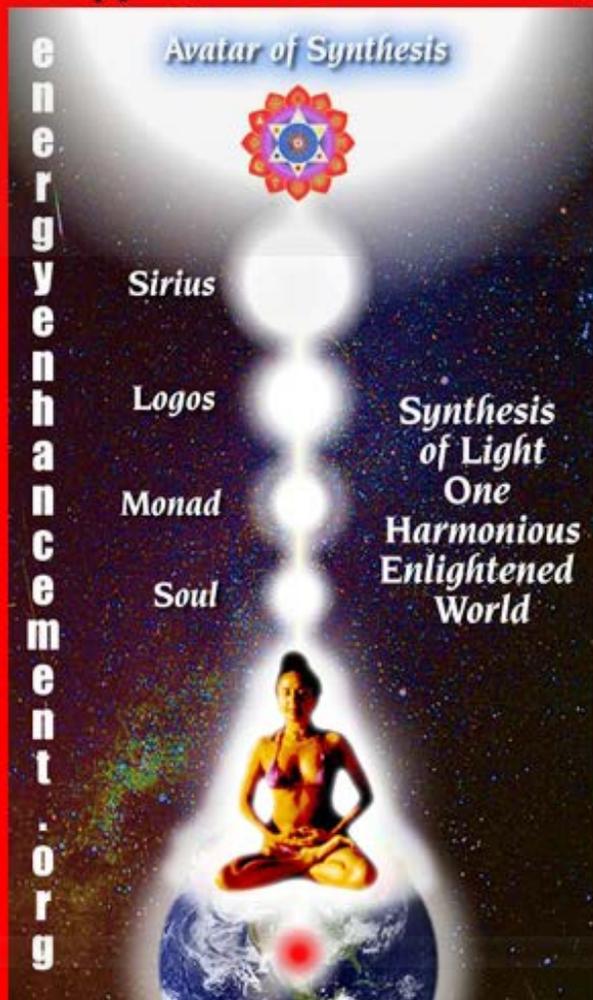
MASLOW, GURDJIEFF, DAME ALEXANDER-NEEL, PARACELCUS AND BUDDHA. THE ANTAHKARANA, BRIDGE, TOWER OF BABEL OR BABBLE, CHAKRAS, MEDITATION, GURDJIEFF, SHAKESPEARE, GURU.

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ENERGY ENHANCEMENT



REMOVAL OF ENERGY BLOCKAGES,
MANAGING ENERGY CONNECTIONS
AND MASTERY OF RELATIONSHIPS

ENERGY ENHANCEMENT TWO

ENERGY ENHANCEMENT GUIDED MEDITATIONS TEACH HOW TO GET INTO ALIGNMENT WITH A COLUMN OF ENERGY FROM EARTH TO HEAVEN, HOW TO ELIMINATE THE ENERGY BLOCKAGES WHICH STOP THE FLOW.

NOW, HOW TO MANAGE PSYCHIC ENERGY CONNECTIONS TO ENERGY VAMPIRES TO REMOVE THEIR BLOCKAGES WHICH STEAL YOUR ENERGY AND STOP THE FLOW, WHICH IS ALL PART OF THE ENERGY ENHANCEMENT MASTERY OF RELATIONSHIPS.

LEONARDO DA VINCI WAS A GREAT MASTER OF WISDOM. MASTER OF THE PRIORY OF SION - INTEGRATION - HEART, INTELLIGENCE, EMOTIONAL IQ, PSYCHOLOGY, CREATIVITY AND EE MEDITATION



MANAGING PSYCHIC ENERGY CONNECTIONS

ENERGY ENHANCEMENT MEDITATION ELIMINATING THE EGO STRATEGIES OF THE ENERGY VAMPIRE, THE PLEASER, BLAMER, VAMP, TYRANT, SELF DESTRUCTOR, MANIC DEPRESSION, ALOOF AND THE POOR ME, VIOLATOR, INTERROGATOR, AND THE STAR

EE MEDITATION AND THE SHAMAN AN INTEGRATED SOUL PERSONALITY GROUNDING AND ELIMINATING FRAGMENTATION, MULTIPLE PERSONALITIES, MPD + DID, FOR THOUSANDS OF YEARS

EE MEDITATION AND EXISTENTIALISM AND KUBRICK'S PSYCHOPATHS IN THE FILMS OF STANLEY KUBRICK, GEORGE LUCAS, STAR WARS, THE REVENGE OF THE SITH, AND PSYCHOPATHS

THE MASTERY OF RELATIONSHIPS, PSYCHIC ENERGY CONNECTIONS, IMPLANTS, ENERGY VAMPIRES, THE INITIATIONS OF ENERGY ENHANCEMENT MEDITATION AND THE MASTERY OF RELATIONSHIPS

BLOCKAGES IN CHAKRAS ABOVE THE HEAD CREATE PSYCHOPATHY.

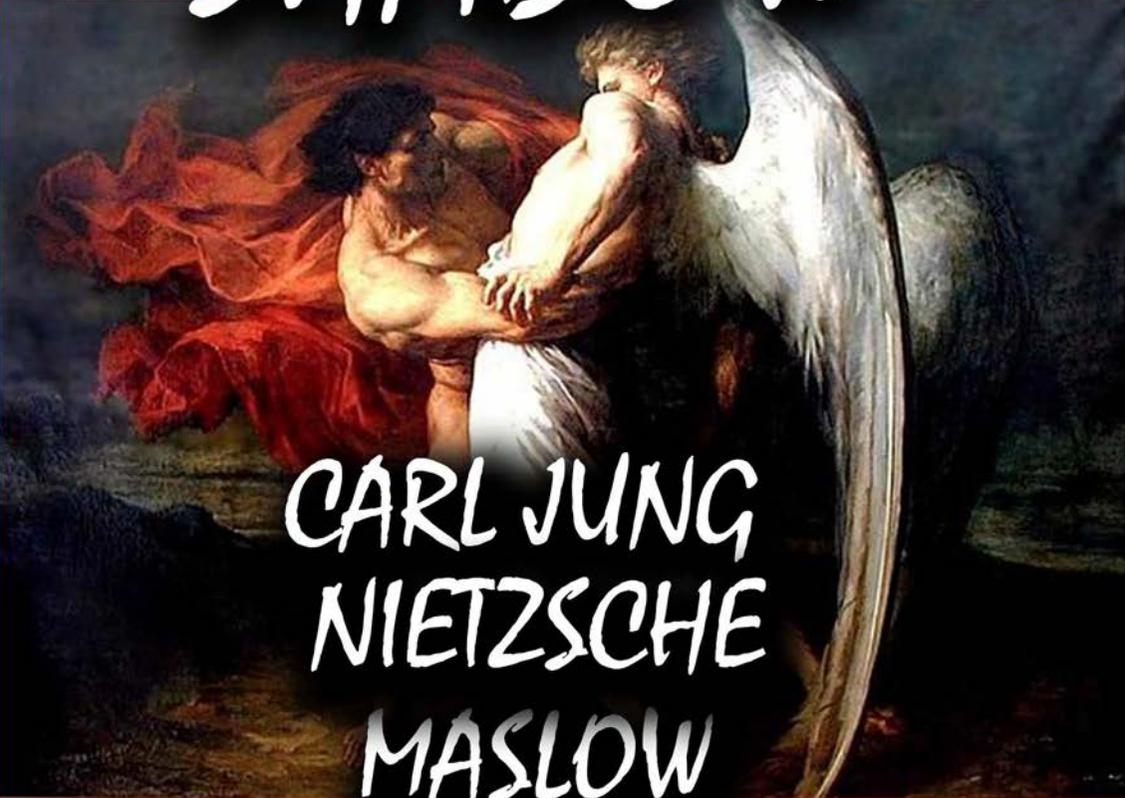
75% ARE PSYCHOPATHS, SCHIZOPHRENIC, AND MANIC DEPRESSIVE.

ENERGY ENHANCEMENT AND TRAUMA, RELATIONSHIPS, DIVORCE, SEX, SEX ADDICTION, TANTRA, GAMBLING, HOMOSEXUALITY, LESBIANISM, DRUGS AND ADDICTION, BAD BACKS, HEART DISEASE, AND CANCER.

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ELIMINATING THE SHADOW



CARL JUNG
NIETZSCHE
MASLOW

JORDAN PETERSON
SATCHIDANAND

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ELIMINATING THE SHADOW

In this book, Satchidanand trashes the greatest most intellectual investigators and descriptors of the Shadow and the Shadow Subpersonalities. Great People - The Highest of All Humanity - Jordan Peterson, Carl Jung, Nietzsche, and every Psychotherapy, Psychological therapist who can describe the problem of the Shadow, talk about the problem of the shadow but have no Practical solution to the Shadow. All of those guys Failed to Solve the Problem of the Shadow. None of these guys have Any practical solution for the Shadow.. And it is the Shadow Subpersonalities which is the Source, The Fount, of All Evil on this Planet... And the Source of All Evil within You!!

Carl Jung says.. "There is no generally effective technique for assimilating the shadow. It is more like diplomacy or statesmanship and it is always an individual matter. First one has to accept and take seriously the existence of the shadow. Second, one has to become aware of its qualities and intentions. This happens through conscientious attention to moods, fantasies and impulses. Third, a long process of negotiation is unavoidable." (Carl Jung)

As Jung notes in the passage above, he thought there is no general technique to integrate the shadow, even though the Buddha and Jesus Christ exemplified the Meditation Technology. For thousands of years great souls have come to earth to demonstrate otherwise, that enlightenment is, "Tat tvam asi" Thou art that!! You are a part of the Universe and have nothing else to seek.

Energy Enhancement Meditation – Spiritual Insight – combined with psychological knowledge is THE complete way of processing and integrating your Shadow Side into wholeness.

Because Energy Enhancement Meditation has actual ancient time-tested meditative techniques that you can use and apply to your Shadow work to Heal All your trauma formed Subpersonalities and Integrate them into the Soul. As long as we have a Shadow Side we have Trauma formed Negative Karmic Mass – pain, frustration, pessimism, depression, anxiety, grief, bitterness, spitefulness, jealousy, anger, greed, lust, addiction, escapism, nihilism. These all need to be addressed and healed – transmuted and integrated.

Energy Enhancement Meditation uses the Psychic Spiritual Center – Third Eye as primary gateway into healing yourself. If we just use psychological analysis then we are limited. If we just use creative therapies, dream exploration, trance-work etc then we are also limited still. This is because we need it all, both sides.

ENERGY ENHANCEMENT MEDITATION – DEEPER THAN THE INTELLECT, MORE PROFOUND THAN THE MIND!

Alchemical VITRIOL is an Ancient Meditation designed to remove Trauma from Memories!! VITRIOL IS A LATIN ACRONYM - VITRIOL. – Visita Interiore Terrae Rectificando Invenies Occultem Lapidem, THE GROUNDING AND TRANSMUTATION OF ENERGY BLOCKAGES – The unification of the conscious and the unconscious., night and day, hot and cold, masculine and feminine. In the center is the Ajna Chakra – Third Eye. The kundalini Serpent has risen from the Muladhara – Base Chakra to the Third Eye Center. The symbolic meaning of its risen state is a raised consciousness that has dissolved duality. A state of Wholeness – Integration – Enlightenment.

"Come together, right now, over me" Singing these famous song lyrics from the Beatles to yourself, You can come together, surpassing your current-self to a higher-self!

With Energy Enhancement Meditation.

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ENERGY ENHANCEMENT MEDITATION

**ENERGY ENHANCEMENT MEDITATION
LEVEL 1 POWER UP!! GAIN SUPER
ENERGY**

<http://www.energyenhancement.org/Level1.htm>

**ENERGY ENHANCEMENT MEDITATION
LEVEL 2 ELIMINATE ENERGY
BLOCKAGES**

<http://www.energyenhancement.org/Level2.htm>

**ENERGY ENHANCEMENT MEDITATION
LEVEL 3 CLEAN KARMA BLOCKAGES
AND PAST LIFE KARMA BY
TRANSMUTATION**

<http://www.energyenhancement.org/Level3.htm>

**ENERGY ENHANCEMENT MEDITATION
LEVEL 4 MASTER ENERGY
CONNECTIONS AND RELATIONSHIPS**

<http://www.energyenhancement.org/Level4.htm>

AGAINST SATANISM VOLUME 9

THE SATANIC SUPPRESSION OF SCIENCE

Satanic Secret Agents, Aristotle; Contarini, Pomponazzi and Giorgi; Sarpi, Galileo and Kepler; Conti, Newton against Leibniz - The Satanic Corruption of Science by the Satanic, Slave Trading, Drug Running, Bankster run Venetian Empire to suppress Steam, Tesla, Fission and Fusion.

Satanic Control comes from the Satanic, "Policy of Poverty" and the Satanic, "Policy of Poisoning" by means of the, "Borgia Cup" and indeed Satanism itself which is a form of Mind Control to create the Psychopaths who will follow any orders.

These policies are designed to weaken the opposition to the Satanic Religious leaders whose aim is to continue ruling humanity as they have ruled the Human Herd for 10,000 years since Satanic Babylon in order to Steal their Spiritual Energy.

All religions are created by the Fascist Peerage Robber Barons whose Genealogy goes back to Satanic Babylon and their created Religions of Satanism, Luciferianism, the Cult of Apollo, Dionysus, Isis, Horus, Osiris have been created to control the upper levels of society for the real Peerage Robber Baron owners for thousands of years. Because if you believe a Satanic created, infiltrated religion, you will believe anything, do anything for the compartmentalised top of the Hierarchy.

Yet, "False Gold is there only because Real Gold Exists" - Tamil Siddar Alchemist Thiruvalluvar

If a member of the Peerage Fascist Robber Baron Elite partakes of the normal Satanic Rituals extant for thousands of years designed to reduce people to the level of a psychopathic beast of..

1. Animal and human sacrifice rituals.
2. Canibalism rituals.
3. Drug rituals,
4. Sex rituals - homosexual sodomy rituals - pederasty rituals - bestiality rituals - torture rituals.
5. The castration rituals of Cybele and Attis.

and then you have your pictures and videos taken of you doing it, then you tend to follow orders!!

Rather than concentrating on problems with food, security and housing which poverty induces in all, only wealth and education can lead humanity to evolutionary meditation the foundation of Human Evolution to the Stars.

Realise that Austerity is not an accident.

Everything must be planned.

If Austerity can be planned and executed for the USA and Europe over 50 years since the assassination of John Kennedy then wealth too can be planned!!

Only wealth can lead Human Evolution to the Stars, therefore anti-evolutionary Satanism created by the Robber Baron oligarchic elite for the purpose of creating poverty, so as to maintain their control over thousands of years, has acted to degrade every part of human society including science as the Satanic Frankfurt school has acted to similarly degrade philosophy, music and art, and the Satanic Robber Baron Drug trade has acted to destroy all culture and civilisation and the poisoning of air, food and water by fluoride, genetically modified foods, glyphosate and other pesticides, and incinerator dioxins and VOC's to destroy the health and energy of all humanity.

In order to secure acceptance for their Satanic ideas, the Satanic Venetian Party seeks to control the way people think. If you can control the way people think, say the Satanic Venetians, you can control the way they respond to events, no matter what those events may be. It is therefore vital to the Satanic Venetians to control philosophy and especially science, the area where human powers of hypothesis and creative reason become a force for improvements in the order of nature.

It is therefore vital to the Satanists to control science because Science is the source of all Wealth creation which can lift Humanity from the level of a beast to Enlightenment itself.