

Re: Solar powered lasers in space

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- *From:* Willie.Mookie@xxxxxxxxxx
 - *Date:* Sun, 23 Sep 2007 19:05:33 -0000
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On Sep 21, 11:21 am, Ian Parker <ianpark...@xxxxxxxxxx> wrote:

On 20 Sep, 22:35, Willie.Moo...@xxxxxxxxxx wrote:> > I doubt that. If you are going to travel at 0.03c you want an ion

[snip] – replied to snipped material earlier...

A mirror based system has the following relation;

$$\text{Pressure} = 2 U / c$$

Where U = power per unit area, c = speed of light, Pressure = N/m²

So, 100 kg /m² = 982 N/m² implies U = 3e8 m/sec * 982 N/m² / 2 = 147.3 GW/m² – which is less than that required for the radiation pressure mode – and actually, the radiation pressure mode above, doesn't include the momentum that is obtained from absorbing the light energy in the first place.. which can help or hinder the thrust effects depending on how the cavity is arrayed relative to the energy being beamed in.

Of course to keep temperatures under control requires VERY VERY highly reflective mirrors. Before the invention of GBO films I would say such things would be impossible. But the advent of GBO films that have reflectivities in excess of aluminized coatings – suggest that continued development along this path would allow mirrors that absorb less than 1 part per million of the incident energy. This means that

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the wings need only disappate 150 kW/m² – which implies an operating temp of 1,269 K – which can be sustained by known materials. So, the ability to construct GBO type films that are 99.9999% or more reflective – would allow the attachment of winglets that when illuminated by very powerful laser pulses, could exert sizeable lift on the vehicle.

1.47 GW per kg is 100x more energy per unit thrust than the 3,000 kps LSD propulsion system. So, the energy level is 100x as great – requiring 400 disks 6,000 km in diameter circulating above the solar surface beaming energy continuously to spacecraft criss crossing the solar system – at an average power of 1e22 watts !! Even at this higher level, the sun produces 38,622x this figure!! So, we have hardly impacted its ability even with this level of power usage.

You will have to get to that point gradually.

Depends on the details. Like I said, a factory on Earth that had a rail gun launcher to launch thousands of 100 kg payloads each hour that would fly to its operating altitude above the sun, joining with others to create a huge power beaming infrastructure, we could do 1 gee laser light wing spacecraft today – or within 3 to 5 years! and supply all the worlds energy besides.

I think you will find that people want to live in settlements.

I think you are not familiar with the psychology, history, and sociology of human beings.

They
try to strike a compromise between a city with its congestion
and a
homestead.

Only by necessity. If you could obtain the services and benefits of a big city like New York, without having to put up with New York – most people would do it.

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New York is where all the action is taking place.

Precisely my point.

That is basically why people are there. In point of fact you could get rid of New York without a fantastic amount of space engineering.

You will always have places like New York. Given human sympathies we may always have a New York! even if its an historic recreation between Wall Street and Park Avenue! lol.

Consider an age where everyone has an O'Neill style spacecraft with maybe 5 people on board, 2 adults and 3 kids. They travel in packs of 10 to 100 in a cluster. Each spacecraft has maybe 500 to 5000 humanoid robots. Each spacecraft also has in a box, the entire complement of personalities of the human race – past and present. The cluster is in direct instant communication with each other. The cluster is also in contact through an interstellar network with every other human settlement. So, the latest skills and personalities and so forth – are available online – and can be made available via humanoid robots – and avatars. So, if for example you needed a medical treatment you would have your robo-doc software – with the latest upgrades available. If you needed anything really, you could make it on your own world. You could travel from cluster to cluster – and your space colony has a number of interplanetary and interstellar cruisers on board – piloted by robots and software... and there's virtual reality.

Also, note that there is a difference between people who have not reproduced yet, and those who have. That is, children have a tendency to grow restless, break away from the group, find mates, and return to a group once they have their own kids.

So, kids when they reach a certain age will break away from their parents and group, and stick around communities where they can meet others their own age. This will likely be in the guise of making it on their own – despite the bulk of the work being done by automation, or education, despite the availability of excellent education software – it would likely be known though as socialization – and cross fertilization.

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This can also be done by developing terrestrial technology.

When you can fly ballistically at 1 gee to any point on Earth in 20 minutes or less (thrusting outward during the middle of the flight to maintain altitude against centripetal force) – the Earth has in fact become a global village. There is a strong psychological connection between the time it takes to get somewhere and what you consider your hometown. Wherever you can go in 40 minutes or less, you consider your neighborhood. If it takes longer than 40 minutes, then it becomes a bother. Longer than 2 hours and its a different place entirely. So in the days of horse drawn carriages it took 4 hours to go 10 miles. I live in Columbus Ohio. Within 5 miles of 'downtown' which used to be Columbus proper, there is Clintonville, and 5 miles beyond that Worthington. This was the day when average speed of transit in a horse drawn carriage was 2.5 miles per hour. Today average speed of transit by velocipede, automotive preambulator, motorized carriage (which locals call simply 'car') – is 50 mph. So, the same 5 miles that took 2 hours before – can be traversed in 6 minutes. The separate towns and villages surrounding Columbus, have merged into a great metropolis, and these villages have become post office boxes known as sub-urban areas – or 'suburbs' to the larger city. In fact in two hour you can span over 100 miles – allowing the City of Columbus to spread across Franklin county forming a single integrated community. At automotive speeds the Cities of Cleveland and Cincinnati, Wheeling and Indianapolis, are the nearby towns today. In an age with high speed subsonic personal VTOL bizjets capable of 500 mph – the Cities of New York, Chicago, St Louis, and so forth, will absorb these towns.. and in an era of 50,000 mph VTOL cruisers – just discussed – the entire Earth will psychologically become one city – and the orbiting colonies and factories will be the suburbs, and the moon will be a small nearby town...

One small point. You are now implicitly postulating VN machines. If all the work is done by robots the colony is VN. I personally believe O'Neill is only credible in a Von Neumann context.

At some point we will have VN machines. Probably sooner rather than later. The early work of Johnny vonNeumann was so successful and suggestive of immediate progress, I wonder if this isn't being suppressed along with some of his other stuff related to secret codes.

How long should we wait. Go now for energy – quite right. VN is at the end of the road, it has to be.

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But we can do a lot in space in the interim. Beam energy from the sun to provide Earth's energy and provide advanced transportation technology (light-wing VTOL super-ballistic transport in every garage) Survey all the small bodies in the solar system. Use the laser capacity near the sun to capture the richest of these to bring into MEO. Use the same factories and launchers to put remotely controlled robots that are shot into space to operate by remote control within MEO – hire the 1.6 billion unemployed in the world, and pay them with output from the factory, sell the excess, and keep the profit.

This might change even as well, if humaniform robots can take on super accurate human sexual characteristics. That way sexually active teens and young adults could interact sexually with a small group of sexually compatible humaniform robots – selected from the entire population of humans who ever were recorded – and have trysts with them. This would work best if one could construct a virtual reality world – similar to Star Trek's holodeck – where one could interact with 'the world' – a virtual community consisting of the sum total of human beings operating real time in a super computer virtual reality. This would have the great advantage in that sexually maturing adults could safely and completely sample a wide range of human cultures and extract from the virtual world, personalities that suited them. In the end, mating could be carried out by exchanging genetic materials – or in more advanced form – exchanging genetic information with 'the world'

If done properly this would lead to a vitilization of the remote community – and the full participation of every human in the larger community of man.

Ditto on terrestrial possibilities.

But that's not needed! There are 3.4 billion men and 3.4 billion women within 1/7 light second of one another. Its a total waste of energy to build sexual analogues of them when you can go meet them in person! Better to spend money to make food production and distribution more efficient.

Somewhere there is a compromise that suits the majority of people.

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This is only by necessity of our limited technology involving primitive forms of communication, transportation and production.

I am not so sure. The question I am asking is why do business executives keep travelling to meetings which are completely unnecessary, even with present day technology.

Because of our primitive forms of communication. I mean, Bill Deming demonstrated the importance of gathering quality data during the 1940s and integrated into production systems that made weapons and so forth – to solve quality problems with weapons. The Japanese adopted these techniques across their industry – and the resulting improvements in quality, volume, and cost allowed them to make very sophisticated products (automobiles, consumer electronics) very competitively with established manufacturers, by the 1960s they were making inroads in the US and Europe, and around the world, by the 1980s, US and other manufacturers began adopting some of the techniques, it wasn't until 2000 that most manufacturers were ISO 9000 compliant – and this is but ONE detail where science has impacted manufacturing. There a whole host of findings that are gathering dust, vonNeumann didn't just postulate and do work on SR machines, he built prototypes! and its been a dead letter. Norbert Weiner, Ken Arrow, Wassily Leontieff, have huge bodies of work – just to name a few – with Buckminster Fuller acting as cheerleader. But all these folks worked in the 1950s. With the exception of Eric Drexler, I haven't seen any follow up on any of this. And these fols suggest small steps to improve the efficiency and quality and cost of our productive systems across the board using cybernetics and advanced math.. haha.. but folks haven't adopted it. Or have been slow to adopt it. I will say retailers have adopted retail automation – this is something I had a small part in. But this is just the smallest drop in a rather large bucket that if we tapped into it, we could transform life on Earth today without VN machines – by understanding adopting and adding to the bodies of work that lie dormant in our collective abilities.

If the lifespan of people radically increased, if people started having "second families" you might have more of a case.

I have a case based on the fact that humans throughout most of their history lived in small bands of nomadic people who subsisted in the environment without outside assistance. Sociologically we are set up to operate that way. We adapt to the 'pressures' of civilization

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because of the huge benefits it confers each of us. The reason modern society accentuates sexuality and sexual adventure is because its one of the few hooks that society has for promoting super sociable behavior. Folks who have a satisfactory sexual coupling and are happily building a life together are viewed in modern culture as a nearly unattainable goal, rather than as a normal maturation process once we are somewhat past our teen years. That's because folks in this idyllic situation become much less controllable and tend to go their own way.

I presume that such demands for social control will be removed in the not too distant future and we will operate once again in a saner age where such large scale socialization is not needed.

We are basically designed for a hunter gatherer existence. Tis is perfectly true. Hunter/gatherer bands were (probably) round about 50–100. With that number of people objectives are fairly well agreed.

Correct. One interesting possibility in the near future, if everyone has access to ballistic transport and the internet, folks can organize along lines that are most productive and complementary – rather than geographically.

The case, as I see it at the moment, is for a solar powered Earth with a population of 9 billion. Space based solar power may quite possibly be the answer.

I agree. I am working on low–cost terrestrial solar and I'm exploring the potential of augmenting that with space based power in the next 5 to 7 years. Beyond that, developing what I call reforming satellites that redirect laser energy – and then sun centered powersats within the next 15 to 20 years.

One of the facts about human habitation is that 90% of the worlds population lives on 10% of the surface. If you do have abundant solar power, one of the things that could be done is to desalinate

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and make
the desert fertile. People who are not space enthusiasts will
ask the
following questions.

1) Lots of people live in the so called Sahel region of
scrubland
which is on the southern fringe of the Sahara. Can this area
be made
reliably fertile?

Yes. Thin film low cost inflatable structures that have well defined
optical properties can be made into low cost habitats, and low cost
green houses. Combined with desalinated seawater available at low
cost –large areas can be irrigated without the problem of evaporation
and degradation of the soil. Aeroponics is also promising in this
context.

2) Could cities be constructed in air conditioned domes,
again in the
Sahara?

Yes, with adequate power from space. These might be considered
elementary tests that must be solved before building habitats off-
world.

These are all arguments which will be raised by the skeptics. I don't
think there will be any skepticism about energy. I don't think
colonization will be a stated goal for a long time.

Well you disagree with what Werner vonBraun said in The New Horizons
study done for the US in secret following World War 2. VonBraun said
we could have begun colonization of the moon in 1948 and urged the US
to take the leadership position. The work was classified for a number
of years, and his advice ignored until Sputnik.

Fact is, we could start to colonize the inner planets and the moon and
cislunar space today if we had the will to do it.

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NASA has already been sold on the idea. It has produced the report. It is putting quite a bit of effort in.

They will get money to look for possible collisions and do lab work to develop possible solutions. They will write reports, and it will go away. But unless a collision is imminent they will not build anything of substance.

However, the same data in the hands of a commercial developer could garner significant money today.

Consider that the US government – the world's richest government – will spend \$2.9 trillion in 2008 – which is a large segment of the \$12 trillion US economy

http://en.wikipedia.org/wiki/Us_federal_budget

But consider now that the global economy produces \$65 trillion and that 9.5 million high-net-worth people have a nest egg totalling \$32 trillion. Most of this is liquid – and looking for reasonable investments.

http://en.wikipedia.org/wiki/World_wealth_report

If a group of scientists along with a number of high-tech vendors got together and made a reasonable plea for a high-tech investment along the lines we're describing –with some sort of immediate payoff (marketable security worth a goodly fraction of the present value of the future income) – you might be able to garner \$3 trillion to \$4 trillion very quickly!! And do significant things again very quickly – without a lot of the politics.

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If you can get onto a downward spiral of costs then things will indeed happen quickly.

Yes. This is achieved by choosing a valid metric of measurement – continually reviewing it – and then investing in improving it. We cannot expect progress in any endeavour until all of these steps are carried out. Once they are we can expect exponential improvements in cost in very short times.

Consider that between 1948 and 1968 we went from the V2 to Saturn V moonrocket. If our goals were directed a little more rationally, and LBJ hadn't cut back on nuclear propulsion systems, we could easily have had some of Philip Bono's NOVA rocket, a Saturn with a nuclear upper stage, or even Kraft Erikhe's nuclear cruiser to colonize mars.

<http://www.astronautix.com/lvs/heliosa.htm>

Basically if you take an outsized Atlas type rocket, that burns hydrogen and oxygen, put a nuclear thermal sustainer on it, and two lox/hydrogen engines on the outside, you have a dandy 1 stage rocket that can take off from Earth, the LOX tanks and sustainers form liquid boosters that fall off and glide back to the launch center.

The hydrogen fueled sustainer operating at 1,200 sec Isp – blasts the payload into a Mars trajectory – with sufficient propellant to execute a soft landing on Mars after an aerobrake entry.

Refueling on Mars from local water found there – and decomposed using a space power version of the nuclear thermal core (built around the nuclear core of aircraft carriers and nuclear sub power plants being built at that time) – the vehicle is refueled and takes off from mars without the boosters (because mars is 1/3 gravity) – and flies back to Earth, aerobraking here to re-enter and then land – to be fully reused.

This mars cruiser was designed and could have been built at the same time the SR-71 was designed and built – 1957. WE CHOSE NOT TO. Using the same nuclear technology that gave us the nuclear jet cruise missile (secret) the nuclear sub, the nuclear powered aircraft carrier and the nuclear airplane.

In terms of politics I think that one significant factor may well be "What is the smallest quantum of money which will start the ball rolling.. You can get significant amounts of solar energy with a fairly large collection area fairly simply. To have a cheap space launch based on lasers requires another stage.

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Well, I've designed very low cost solar panels. And I've incorporated them into solar synfuel process to create tremendous value. Once that value is realized, additional facilities will be built. Additional profits will be earned. And there will exist many large central solar collector sites that can be improved by simple space laser. So, I can see things moving rather easily from where I am today, to where things can be tomorrow.

Once you successfully delivered on the promises made on the first go round – you'd find another \$8 trillion to \$10 trillion available...

At that point –supposing you'd provide a 30% or more ROI – the whole project becomes self funding. You'd get a bubble – but it would be supported by increased outputs and so forth. In all, you'd kick up the global economy from 4% per annum to something like 14% per annum – which would support your growth.

That is, success would be self– propelled after the first and second go round. In short, you'd be bankable.. and you'd have access to the world's banking assets at that point – and after that, access to your own self generated revenue stream. This is the benefit of profits. You can use them to sustain growth, while throwing off payments to those who took the early risk.

I profoundly disagree.

You are profoundly wrong.

We have indeed been lied to about Iraq,

That's one type of lie. There are others. For example, that smoking cigarettes will make you sexy. Or that drinking to excess will make you happy. Or that spending in excess will make you successful.

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These lies benefit those who tell them, at the expense of those who believe them.

Cigarette advertising has now been banned.

On television here in the US. It still exists in other forms. And the thoughts exist and are repeated even without the ads. Look at the advertising budgets of the cigarette companies. The product placements in movies as well as people on the street handing out cigarettes to every adult passerby. Go to a nation that doesn't have such bans and you can see the impact.

but let
us remember this. It is the Iraqis and not the Americans that
have
produced 4 million odd refugees. 2 million within Iraq and 2
million
is surrounding countries. I shall be going on a tour of Syria
late on
the October. There are 1m Iraqis there.

America created the concept of the rouge state shortly after opec flexed its muscle over oil supplies. This after the US oil production reached its peak and entered secondary production. The US knew that it only had 40 to 50 years before the world's oil production reached its peak as well. (this is quite different than the the world running out of oil – which won't happen for 200 years or more) – which is now only 10 years away. The market is already adjusting to the changing value of oil – increasing the price from \$10 per barrel in the 1980s to over \$60 per barrel today.

All rogue states were oil rich countries – and together they comprised 50% of the world's oil reserves.

N Korea is a rogue, but is not rich. I will agree some of the Middle Eastern rogues are rich.

Is the average Libyan rich? the average Iraqi? the average Iranian?
I don't think so. They have oil and that's it. By not trading with them that oil is placed in storage – and the remaining oil is overdeveloped to take up the slack. When the produced oil runs out, the oil in storage can be brought on line – and overdeveloped as

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well. This is a way of producing an extended period of stable prices for the US. The US can afford to pay high prices more so than any other nation. This policy creates an extended period of stable moderately high price oil that is very beneficial to the US.

The US had plans to put these reserves in storage – and let the others use their oil profits to expand output above that which oil companies would have deemed prudent in a world where ALL producers were competing in the market – this had the impact of moderating the price of oil – at the expense of those who were nominally benefitting – by accelerating their usage of oil. This benefitted the US by stabilizing prices at around \$12 per barrel – 6x the price enjoyed by the consumer when the US had excess capacity (oil was \$2 per barrel before 1970s shortages). Now, when Saudi Arabia, Indonesia, and other major OPEC members are entering secondary production – the US finds reason to institute regime change in these former rogue regimes – and bring them online.

I would like references to this. The problem I have always had with linking US foreign policy to oil is that spending money on defense is simply not a cost effective way of obtaining oil.

We obtain the oil by buying it always. Taking it off the market and putting it on the market adjusts supplies, which given the demand, adjusts the price. It takes very little or no money at all to say – hey, we're not going to trade with these guys – and don't you trade with them either. How much did it cost to find out that Libya was a rogue state? Nothing.

look at figure 2 in this report

http://www.eia.doe.gov/pub/oil_gas/petroleum/feature_articles/2004/worldoilsupply/oilsupply04.html

Look at the exponential increase through 1970... that's greater than 5% growth btw. It was this strong global economic growth since the 1950s that led to so many rosy scenarios about a wonderful future! haha.. anyway (sigh) continue that 7% annual growth rate forward – on top of 1973 – and you'll see you'll reach the peak that is coming now in 2026 – by 1986 –

Without the oil crisis we would already be in secondary production. And what moderate that output? Why did we meander along the horizontal and not have strong growth for 30 years? Because SUPPLY was removed from the market.

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Far better to spend
your money on nuclear power (peaceful), terrestrial solar power, more
exploration if not space lasers.

Agreed. If you don't step on the toes of special interests who have invested heavily in acquiring control of reserves. They want to make sure that the reserves are fully used, and of course get as much profit as possible from those reserves. This was the view of the business community in 1950s. Soon science would make nuclear power too cheap to meter and the age of oil would be gone. This was derailed at that time. Very similar to the tension between the electric light and gas lamp in the 1880s. But instead of the new technology winning out. The old technology won out. Then, in 1964 LBJ asked Brookhaven National Labs to conduct a study to resolve the looming energy shortages. We KNEW that by 1970 the US would be entering secondary oil production. BNL came back with a plan. Direct thermochemical decomposition of water into hydrogen and use the hydrogen directly or in synfuels by upgrading low grade carbons. LBJ got bogged down in Vietnam, did not run for re-election and his Great Society program along with this little piece, was scrapped by Nixon. The shortages came, the economy went in the dumper, the US went off the gold standard, OPEC flexed its muscle. There was increased unrest in the Middle East. The US stop trading with half the reserves and got everyone else to stop trading too. This created a period of no growth – but a period where US was in charge of everything. No major money was spent. People wanted the growth back, and wanted things like they were in 1960s. Carter came to office – a nuclear engineer – promising to do something about energy. Before he could turn around TMI happened and he was urged to drop all references to nuclear power in his plan. The US spent more money on energy research than in going to the moon and never produced one damn thing that challenged big oil. This despite all the expert opinion and all the studies done up to that time. NONE of the programs that were suggested by the nuclear industry were adopted. Nothing nuclear came out of the research. Which brings us to our present situation. Now the hard stop – or real end of oil on a global scale – will happen in 2026 – and the DOE has rediscovered the 1964 BNL study and proposed a GEN 4 nuclear program which is basically that program – to start in 2030. Why 2030? That's when oil prices will start to falter due to economic depression. The oil companies have successfully executed their end game – at great cost to everyone else. .

Did we use up all the stones before we ended the stone age? no. Did we burn all the trees before we switched to coal? no. Did we burn all the coal before we switched to oil? no. Did we burn all the oil before we switched to space power or nuclear power? yes.

Its not a matter of technology. Its a matter of politics and lack of true concerned leadership.

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Clearly this long term policy was planned – there are even papers available from US state department and others. Plainly it was a way to moderate the supply of oil in a way the benefitted the US relative to all other players in the market. Obviously this is our primary motivation. Just compare our attitudes of WMD in Iraq and need to invade Iran because of a nuclear power program versus our continuing lack of interest in Pakistani nuclear weapons – which already exist, and the nuclear program of North Korea (which was of no real interest until the North shot off a rocket capable of reaching US homeland)

The one reason for attacking Iran is failure in Iraq.

You are looking at the tactical situation we face today and ignoring the strategic discussion I am trying to have with you.

The fact is that when the US withdraws Iran will take over the country, either in terms of a more or less client state (which I think they would prefer) or as an organic part of a united Persia.

So what? Iran was trying to take over the country when Saddam ran it? Syria won't sit still and neither will Saudi Arabia. Turkey and the Kurds will have a say too. So what? That oil means nothing if we switch to another source. And that only matters to the oil companies. That's all I'm saying.

Pick up a book on the Ottoman Empire and read it. You might also want to read the first chapter of THE COMING WAR WITH JAPAN by Merideth and Lebar I think. Great stuff. Talks about what the US has done to maintain its strategic position in the world, and suggests what it might do in the future. Which is not to put the US down. If the US weren't number one – someone else would be, and things would likely be far worse than they are.

But at some point, the US has to have an end game. At some point the entire Earth will be politically integrated and peaceful. JFK wanted to start down that path in 1960. Switch to nuclear power from oil. Switch from a nuclear competition of the cold war to a space race. Use our intelligence community to inspire peace and cooperation rather than seek advantage in pointless competition. JFK lost. Nixon/ Eisenhower won. The economic collapse of the United States in 1975 – including our failure in Vietnam is the result.

I hold no brief for Bush, it is all his handiwork,

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Bush, like any President is doing his best for America and all Americans. America elected him. He truly believed we would be greeted as liberators. We were not. He had no game plan for if he was wrong. Now he's stuck and he's reviled. This really is incidental to our long-term strategy. If in the summer of 2004 a great peace settled over Iraq, and a free Iraq inspired Iran to throw off the yoke of their ultra-religious zealots and embrace freedom – and both nations were pumping tons of oil into the world market – and oil was \$22 per barrel – and this made it so that Putin would have to kiss the West's ass for money – Bush would be hailed as a great genius and liberator and would be given the Nobel prize by the Europeans as a means to apologize for not helping him.

BTW – The current plans for Iran include "letting the anthill sort itself out at the end of the strikes". Quite clearly nothing to the US liking will emerge. There is even the possibility of an intervention by a third country. Possibly Putin under the unberella of the Central Asian Federation.

Yes. The chinese are already building an oil pipeline into the region. This is bad for the US, but not bad for the oil companies that supply the US. China will have access to low cost energy. The US will have access to low cost chinese labor. The US will pay more to the oil companies for the reserves they DO control (they just signed some deals with Libya) – and they'll get top dollar for those by the time the US does what it should have done 45 years ago.

That is, the reasons for going in don't matter as much as what is achieved after we got in.

The question we should be asking is why we weren't greeted as liberators? And what would it have taken for that to happen?

9/11 can be called an intelligence failure. I think the week after the Iraqi people pulled down statues of Saddam, there was a similar intelligence failure – they hadn't prepared the ground for victory, or given sufficient thought to how to handle the various factions and bring in their neighbors in a positive way.

Of course in retrospect, Bush lost New Orleans to Katrina largely due to his inattention to details – so, getting the details wrong isn't surprising.

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I believe that a better President who paid attention to the details that mattered – COULD have affected a regime change and gotten out with the oil flowing. Those details may involve some culpability. Halliburton, and others close to the VP may be involved. Their greed may have alienated stakeholders in the Iraqi population who needed consideration to make a peaceful outcome possible. If so, this needs to be revealed and corrective action taken.

Ditto for Afghanistan, although its not so important to American interest as an oil rich state, but Afghanistan is important to long term relations with the muslim world. The fact that a gas pipeline from Russia to the Indian ocean got built while heroin still flows unaffected – is only one indicator that we are not doing all we can for American interests in the muslim world – but we are here caving in to powerful special interests in America under the guise of serving America.

History is what actually happenned, not what might have happenned.

That's a ludicrously stupid statement. History isn't just what's written in the press releases of the White House. Its what's written in the secret documents, private agreements, and actions of otehrs as well.

Knowing WHY history happened the way it did is important – and to understand that, you need to look at the strategic thinking that informed those decisions and what opportunities they had at that time. Why don't we do all we can to stop heroin production in Afghanistan? No one has an answer for that. Why doesn't anyone in the news media Fox or CNN ask this question? No one has an answer for that either.

One thing that someone looking into America from the outside, I am in fact British, finds hard to appreciate is the fact that America wins large numbers of Nobel prizes, but has repeated intelligence failures in the area of public policy. The official CIA report on 9/11 shows almost criminal negligence – not to mention of course the initial error of supporting OBL in the first place (that is when he was fighting Soviet forces).

Agreed. And what's more, Americans for a New Century met in DC in

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2000 and concluded that they needed a Pearl Harbor type event to galvanize public opinion behind their goals of US dominance through direct military intervention. Also, the folks that were responsible for the FIRST attack on the WTC were largely apprehended, but some got away. And those that did were being tracked and monitored by the FBI. But, when they came back into the US, the US lost track of them. No explanation. And those guys were on the flights that crashed into the WTC.

Meanwhile, rather than address these serious questions, you have crazy folks marginalizing this whole avenue of discussion by saying bombs were put in the WTC by US intelligence community and so forth.

getting rid of
Saddam Hussein opened up Pandora's box.

Nearly all muslims in Iraq hated Saddam. More than they hated each other. This was the fundamental reason Bush felt we would be greeted as liberators. And he was in the main right. But details count, and he got the details wrong – if he even knew of them in the first place. The intelligence community needed to get their act in gear and really get the details right. Like I said, getting rid of Saddam could have inured to our benefit. WE let things get out of control because details were not attended to. That was too bad for us.

However it does rather rubbish
the Rousseau theory.

Not at all. If New York City were under the dictatorial control of a single person who raped them financially, someone who knocked that guy out would be greeted as a hero – depending on what happens after!!! We did a lot of things wrong after – bowing to field commanders and others with short term tactical goals – at the expense of long term strategic goals. There are lots of different factions who live in New York and they don't all like one another. If they were set at each others throats for 20 years to empower a dictator – and then that dictator fell. There would be a day or two of celebration – but without strong police, fire, and public services, without immediate economic benefits – no matter how slight – flowing from the liberation – without identifying and eliminating individuals who form the centers of resistance before the liberation fight is started – New York would quickly fall into turmoil.

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It has nothing to do with Rousseau or the propensity of New Yorkers toward violence. It has everything to do with going into something without getting all the details right. I mean, a surgeon can say you need to have an open heart surgery to clear a blocked artery and tell you all the benefits that will have for you. But if the surgeon gets one little thing wrong – you're dead. So, there's a lot of planning and a lot of training and a lot of thought going into your surgery before he starts cutting. If the surgeon tells you you have a blocked artery and you don't, and then doesn't pay attention to some detail – ordering nurses from the OR who bother him with those details – and you die as a result – are you going to believe the surgeon that says, well I tried, some people don't make it, he had a weak heart! no – you'd sue his ass for negligence. But before you did that you'd collect the evidence. You'd get the video of the OR, you'd get testimony from dismissed nurses, and so forth. Of course if the surgeon also works for the courts, he might suppress certain evidence and deny access to certain people and information – and all the while question your family who was trying to cash in on the death of their father/husband – would you side with the surgeon?

Being a surgeon is tough. Being a president is tough. But we need to think clearly about what's going on and do what's appropriate given our situation and opportunities at this time. I think a new president can work with the UN to increase their level of involvement – while reducing US involvement – and attempt to try again being greeted as liberators. That is, we don't want to encourage those who think that by bombing Americans they can get them to leave. This will encourage extremists to bomb Americans at home. As many military folks warned – America doesn't have the resources to have a war in Iraq, a war in Afghanistan and meet our global military commitments – so, we need the UN before we go in. So, let's go get UN support like we did in Bosnia and the first Gulf War. And then leave it to them – but getting the details of the hand off right – so that THEY are greeted as liberators. See?

But fortunately, I don't have to solve this problem – and so, it doesn't matter if I'm right or not. But this is my thought on the subject.

My thoughts are different. Dictatorship arises when democracy fails to answer the problems of a society.

Dictatorships arise for the same reason religions arise and for the same reason any form of government arises – people have an irrational relationship to their own power and irrationally give power to father

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figures. This has been discussed at length by Freud and Miller.

Islamic society contains one major contradiction.

Just one? haha.. All religions have multiple contradictions stemming from poor child rearing. Emotional needs that are not addressed in childhood, continue buried in the conscious of the adult. Sort of like a mental club foot arising from poorly fitted shoes. So they have a mental limp! Its easy for bullies to push them over. Same here. The forms of government that humans adopt have far more similarities than differences. Those similarities stem not from any rational cybernetic need – but from irrational emotional needs. Those needs are not present in properly raise children, or adults who have successfully completed a valid course of therapy. Those sane individuals are by far a very minute minority in the population.

Islam sees the spiritual and secular rulers to be one and the same.

If God exists then every individual is created by God and has a capacity for direct personal revelation and direct contact with their creator. According to those who have had such revelations such contact is natural and a source of great joy and great wisdom and peace that surpasses understanding.

Religions exist to extract temporal power from people by removing the individual from his or her natural connection with the divine and substituting a connection with the religious institution. This is the worst form of blasphemy. Religions are successful at this with people who as children suffered certain types of mental and physical abuse as outlined by Miller and others. Religions also promote rules related to free sexual expression and child rearing that promote the very abuse that makes it easy for them to retain their power through the generations. Religions also align themselves with other temporal powers to maintain their power and control as well.

The Islamic religion is not unique. It shares many features with all other powerful religions in the world.

Modern psychotherapy and many aspects of the self–help movements – stand in stark contrast to these traditional forms of religion.

As Echart Tolle has said, its all madness, and you can say nothing about it other than that it is mad. To say any more is to be drawn into the madness. It will collapse in time, and in time, the peace

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and the joy and the wisdom that life offers each individual from within – will be expressed.

This is one factor that generates tension perhaps more than any other.

As children we have a great joy in life and look toward the future with great hope. That hope is destroyed by our parents. We can't be the cowboy or the astronaut we always wanted to be. We must be realistic. But joy in another guise persists. Well, I can have love – if I can find a good mate and raise a family – this becomes a source of hope until about the ages of 40 to 60 – and by then, you give up and become bitter. Until you turn inward to the small still voice that has been there all along. Then you realize its all bullshit. But then, you're an old fart and no one listens. haha.. But it doesn't matter.

But I can see that in the better schools around the world and better homes – better meaning the parents are knowledgeable not necessarily rich or powerful – a growing trend toward encouraging children to tend to their inner vision and inner voice – and to retain the joy and convert that hope to courage and certainty – and grow to be awesome awesome adults that will transform the world... and all our little shit we did before.

Get past personalities and so forth and look at the facts.

In fact I would put things the other way round.
Governments in fact reflect the prejudices of their populations.

There is an interaction. Despite what we tell ourselves markets and governments are incapable of doing what we expect of them. This is a scientific fact. Arrow proved it. There is not good solution – and this knowledge is used by specialists to expand the control of specialists at great cost to everyone else.

That is, people make irrational choices collectively that they wouldn't make individually and so often they make collective choices that are not in their own interest. Condorcet first noted that cycles

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of voting can occur over long periods. Arrow explained in detail why in the 1950s. Rather than correct this shortcoming, specialists have exploited this shortcoming to manage political processes. Where applicable, and to a lesser extent, the narrow shortcomings of the market due to this are exploited by marketers to increase profits. But the major unraveling of government began in earnest in the 1950s and have accelerated ever since. The military's failure in Vietnam to win the hearts and minds of the American public, has highlighted the importance of infowar to modern warfare. So, this hasn't helped candid public discourse either – and a possible return to representative government.

Hearts and minds have not been won in the Iraq war either.

They could have up to about 2 days after the statues were pulled down. But asking the man who lost New Orleans to plan for the post invasion strategy is asking a bit much. But like I said, this oil is going to China, and Libyan oil is going to the US, and by 2026 – the oil companies will have played their end game.

This last paragraph is a little bit contradictory. The military has tries to win hearts and miinds, but has failed.

The military must rely on their commander and chief to create a strategy with the expertise he can draw on, central intelligence, state, others who advise the White House – to come up with a workable strategy. To throw it on the field commanders or generals even, and then say they failed is to do them a disservice.

It's knowledge is clearly incomplete, its control of the sources of information incomplete.

Yes. What is reported on CNN is self-consistent. But is incomplete. Fact is, there is a lot more opportunity for action than you recount here. Fact is, these were ignored. Fact is, Bush had no idea how to handle post invasion.. Fact is he had no idea because he gave it no thought – had he given it some thought and authorized action on it – he would have had a workable plan. But that didn't happen. Fact is, the President is responsible for this failure and he has not stood up and taken full responsibility for it.

You know my perennial hobbyhorse AI. Now in the future television programs are going to be sent to us via the Internet. Google is going

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to control our hearts and minds.

This proceeds from the false assumption that people are merely robots that respond to inputs. Fact is, we have the capacity to create our own ideas and follow through on them – stemming from deep seated desires.

Now Google is in fact international.

I have talked about Radio Reloj (which in fact is the name of a radio station in Cuba) in the context of SETI. Sync pulses can be observed tens of parsecs away.

You are making non-sequitor statements.. this makes no sense in the context of what we were discussing.

Quite clearly the demise of Radio Reloj will have a lot to say about how we perceive the word. We have to be certain that AI provides a neutral picture. So far Google seems to be doing.

You are not making any sense at all. I thought you meant AI = Artificial Intelligence. I know what Google is. I don't no what Radio Reloj is. But if you think that by listening to a media source you can change life experience in any tangible way you are mistaken.

There
was anti semitism in Germany after WW1. Hitler did not
creatmore rational.

The rise of nationalism corresponded to changes in child
rearing
practices in the 1880s – and have created a self-propagating
series of
events that have made the identification with national
identity
stronger with each succeeding generation. This is another
disruptive
trend. Governments have not been shy in exploiting this
connection
and creating institutions that institutionalize the abuse of
children
for the purpose of building more compliant citizens – while
at the
same time, eliminating troubling sections of their early

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training –
against the wishes of academia.

Clearly when we connect emotionally with governments because we feel they can protect us from other nations – we do so because we personally feel threatened and by those nations and this sense of threat is diminished by the association. Unexplored is the culpability of our nation in creating the situation in the first place – or the possibility that everyone would be better off if we got rid of nationalistic notions in the first place. Rarely is this idea even broached – such as John Lennon's song – IMAGINE.

Today we do not feel as much threatened by other nations as by individuals who want to kill us and are often not too worried if they kill themselves too.

I thought you said you were British? hmm.. Look, people surrender power to those they think can help them accomplish what they feel needs accomplished but cannot do it themselves. The modern nation-state has exploited this process to maintain control over its people using all the knowledge at its command.

All nations do this. In a world where the Soviet Union collapsed and was no longer a credible threat, the US needed another enemy. So, we turned a blind eye and let the second attack on the WTC happen.

But terrorism isn't new. We've had suicidal terrorists since Thomas Rainsborough! (1647) haha.. and the powers that be have used them, or any enemy they could impress the public with to raise taxes and exercise ever more power over their subjects.

The thing is, we need to change the paradigm under which we operate if we want to change our condition – and this takes a change in the way we raise our kids and the way we deal with our emotions in adulthood.

but not to push the arms race forward and always be prepared to sit down to discuss disarmament.

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Why? Identifying ourselves with a nation is a means to possess power when we would otherwise feel powerless. It evokes deep seated fears and irrationalities that go right back to our earliest years when we were powerless before all adults. No one sits down and talks disarmament, unless they are talking from a position of strength, and then they are forcing a lesser nation to disarm or face the dire consequences of a superior force. This is what you mean when you say that. You don't mean the US or whatever nation you're from – would sit down hat in hand and agree to be bullied around by a superior force do you?

You are believing many of the lies that have become part of the global culture over the past 50 years. This warps and perverts your thinking.