THE SKY IS FALLING
OR
ON REVISING THE NINE TIMES RULE

PART V OF V

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By now you should be conversant with the fact that ice ages happen on an eerily regular basis (Part I), that they are associated with earth's rickety orbit and have nothing to do with carbon dioxide (Parts II and III). Additionally, in Part III we did the math and realized that you just can't get to global warming with CO2. It is on the wrong side of the decimal point in terms of concentration (0.04%) to be much of a player unless you imbue it with superpowers that would also make it the darling of the insulation and energy conservation industries if it were really true. In Part IV we came face to face with ourselves and how climate change was THE agent provocateur in our evolution. We are beholden to climate change to smarten us up to our present state. Here in Part V we will learn what it all means

By picking on CO2 at 0.04% of the atmosphere, we placed ourselves firmly on the wrong side of the decimal point. We need to get over the decimal and into the real percentages. We will work our way up, so to speak. Did you know that one quarter of all mammals are on the endangered species list? How about a third of all amphibians? Make that a 50% loss of all the earth's forests and all the earth's grasslands. "*Short of a miraculous transformation in the attitude of people and governments, the Earth's remaining closed-canopy forests and associated biodiversity are destined to disappear in the coming decades*" says the 2001 UN study's author Klaus Toepfer. Considering all of the complexly interwoven equilibria that has evolved with us on this planet we estimate we are putting 40,000 species extinct each year, that's about 50 per day.

THE SIXTH HERESY

At a conference held on deforestation in December 2007 in Bali, Indonesia UN specialists estimated that 60 acres of forest are felled ever minute worldwide, or at the rate of 32 million acres (50,000 square miles, or about the size of Mississippi) per year according to the UN's latest "State of the World's Forests". "If we lose forests, we lose the fight against climate change" declared more than 300 scientists, conservation groups, religious leaders and others at the Bali gathering. Destruction of forests is estimated to account for 20% of anthropogenic greenhouse gas emissions, second only to electricity and heat generation by fossil fuels. Try not to forget that forests store CO2 and carbon. They are pivotal in the extinction crisis.

In LA, 65% of the surface is devoted to transportation. That is, paved, or at least the natural surface replaced in some way. This changes the albedo, the reflectivity of the earth's surface, while also adding large quantities of new vertical surfaces to absorb/reflect heat. Stir in some dust from construction sites (PM10, or particulate matter greater than ten microns), photochemical smog and I have your anthropogenic effects *right here*. Now these percentages are in whole 10's of percents, not hundredths of one percent, comprende?

That has to have some effect, but even agnostic climatologists will honestly tell you we really have no idea what will happen.

But you don't even have to go there to find the real problem. Because, as much as I know this is going to hurt, the real problem actually turns out to be growth. As in us. All of us. All 6.6 billion of us. Remember when Kofi Annan announced that according to the best mathematics we can apply, we had just crossed the 6 billion mark?

(http://www.poodwaddle.com/worldclock.swf)

Go visit the above clock and read it very carefully. When you are done, factor in

**** POP QUIZ ****

How many more planets at this level of consumption will we need to supply 6.6 billion of us? (Hint: The UN has recently estimated this, go and see if you can find it)

**** POP QUIZ ****

Because as impossible to come to grips with as this may seem, we passed "sustainable growth" a long time ago. To keep all 6.6 billion of us in American Plush we will need *insert pop quiz answer here* more "M" class planets. The problem is detailed for you on Figure 1.

But the way the Nine Times Rule works is so tortuous that it can manifest itself in rather bizarre ways. Having picked CO2 apart and found it wanting, I finally replaced my 14 year old car with a new Hemi. A friend of mine, who seemingly replaces his cars annually (leasing), roundly castigated me for buying this vehicle, and reacted rather poorly when I went over the facts of how the high quantities of nickel in the batteries of his Prius (this year's lease) actually require more fossil fuel emissions (think of the amount of lowly refined and questionable sulfur containing fuel massive ore freighters burn) shipping it all over the planet (for multiple specialized processing into batteries) than a Hummer, if you consider the total life cycle impact on the planet. But, as my ex used to say "*Don't let reality intrude on a good story*." He had his third child 2 weeks before I bought this car. Figure 1 moots the entire discussion. And that folks, is how the Nine Times Rule works.

A professor of mine who reviewed this piece in an earlier form related a program he had heard recently on NPR that a new way for the young, over $200k/yr couples to flaunt their wealth is to have four or more children.

One interviewee even said that her neighbor had just had her fifth child, which makes her want to do the same to show that she and her husband can also support such a large family.

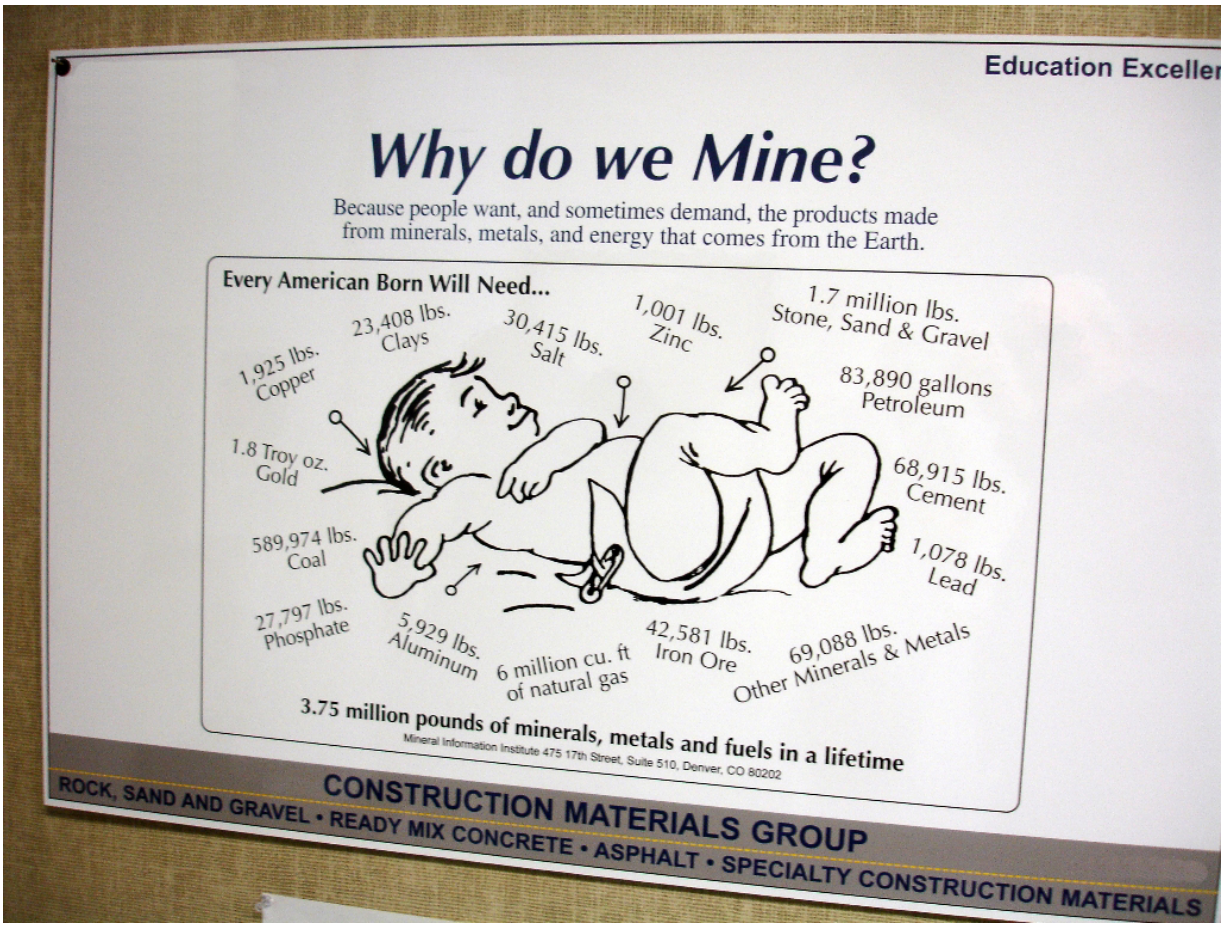

Figure 1. One American = 1,875 <u>tons</u> of mined, produced and refined energy and materials. Six Billion earthlings = 11 trillion, 250 billion <u>tons</u> (in American consumption tonnage).

And make no mistake, we are more than just addicted to growth, we are actually dependent on it. We have no way to change that. Think of a negative economy, where you, as CEO, notify less and less shareholders of lower year to year profits, everybody (meaning those that are left) clapping on how much lower their dividend (and planetary impact) will be this year. Only the successful exploitation of fusion, or the next ice age, will change any aspect of that outcome. We will not pass, much less enforce, laws limiting family size or forcing those that do not have this lifestyle from trying to attain it, nor do we have the technology to get us those *insert pop quiz answer here* additional "M" class planets, to bring their goodies back or simply invade them. So, nature will run its course. California, looking pretty smug, with its carbon credit program, will divert billions that could be used to, say, research fusion, or "fix" our orbit, for instance. Perhaps, appropriately, for California, AB32 will not affect in either way, the 97.78% of non-anthropogenic GHGs, or the eccentricity, obliquity or axial precession the universe has bestowed on planet earth.

And what about where we do these things? Thirteen of the world's sixteen largest cities squat on estuaries, and coastal human populations are set to double over the next 25 years. In China, an estimated 80 million people have moved to the coastal areas in recent years, in the U.S., an estimated 3,600 move daily to the coast, and in Australia 90% of all building activity is in the

coastal zone. If you can legislate against a relatively innocuous gas at trace concentrations, try herding cats. Estuaries are the most important cradle of life on this planet.

Best to stop for a moment and take a breath. I have hit you with a lot. And I do indeed have a sucker punch left. But it is always good to look back over what we learned and how we got here (puns intended). For the last 2 million years, we have been suffering through ice age after global warming period, time after time. Climate's a changin' all around us all the time. Massive, 400 foot shifts in sea levels, and frequent. While on those long slow slides into each ice age (reacquaint yourself with Figure 4), the smaller brain cased amongst us made the most fatal mistakes, leaving Homo sapiens here today with the Nine Times Rule. We know how it gets revised, and we know when. And we know that in terms of geologic time we are ripe for starting another long slow slide into another 100k year long ice age. If it is like all the other cookie cutter ones, the answer might be yes.

But there is this fly in the ointment this time. Like the one that may have precipitated the NHG event and is estimated to have been half a kilometer in diameter, we have a possible date with one a little over twice its size. We may not have 100k years to smarten up this time. We might only have about 872 years. So if you are worried about sea level 100 years out, mark your family calendar for the 16th of March 2880. 1950DA may be coming to dinner. It could hit us with the force of 100,000 megatons, or about 4.7 million Nagasaki "Fat Man" atomic bombs.

We may have to revise the Nine Times Rule ourselves. I don't personally care whether we, meaning Homo sapiens, gets this or not. What will be will be. But it does irk me royally to see laws passed to put hard controls on an innocuous colorless odorless gas (the innocent) when the real culprit (our rickety orbit) gets off scot free with the crime, time and time again. Everything about that is just wrong!

What history *can* teach us is that religions do tend to come and go. Imagine how the Greeks must have felt when someone told them that Zeus, and the pantheon of gods resident on Mount Olympus, were just a myth? The Egyptians had the same problem with the sun god Rah. And if I am not mistaken, the Babylonians once worshipped Shamash and Ishtar before abandoning them in favor of a newer religion, Islam (Babylon lay 90 kilometers south of present-day Baghdad). Somewhere back there, not all that long ago by comparison, others of us stopped burning witches at the stake (though this whole thing has given me pause to consider if curtailing that practice was such a wise decision). It is interesting to note that every organized system of religion in the world today has traces of ancient Babylon. More than a few religions have come and gone, relics of just how pervasive and insidious the Nine Times Rule really is.

Take a few moments, like I did, and sit back and ponder on all this for a few moments. Maybe even read it through again. And see if you come to the same conclusion I did. Maybe we have reached Childhood's End. And then ask yourself, "Would even a cave man get this?"

And this is where we come face to face with the Nine Times Rule again. I fell for it, you fell for it, and possibly worst of all, at present anyway, is California REALLY fell for it. Which means this is a really tough rule to break, huh? California passed a law with a remarkable presumption. We are going to stop Global Warming (that's all over the world, mind you), by passing a law which will erect a complex carbon credit trading scheme, which, at the end of the day, will no doubt reduce emissions of an innocuous colorless odorless gas which has never been a problem, and shows every physical property of not being able to really contribute to Global Warming.

Meanwhile, back at the Ranch, the planet continues to go drunkenly on its way through its orbit. Even with very questionable mathematics and physics for CO2, we are really going to not only pass laws, and continue to pass more laws against what isn't the problem, while not paying any attention to that drunken orbit of ours which is not only predicted to, but has caused spectacularly larger effects on our climate? Is this what they mean by "pissing in the wind"? If we don't divert all revenues from all carbon schemes (like AB32) to a "Fix Earth's Rickety Orbit" fund, then we will have done less than a hill of beans (pun intended) worth of difference. Because those 400 foot sea level rises just keep on coming, right on the heels of those 100k year long ice ages. Those things are astronomical, and recent data shows many of the other planets are cooling off now.

In summation, we have wreaked havoc on our environment, and there is no question that with such massive effects on our biosphere, and its diverse and intricate equilibria, we have fundamentally altered many of these equilibria, which will be manifesting itself over time. Yes, we are emitting massive amounts of CO2 and other gases that undoubtedly will have some effect, but unless you do the voodoo math thing, you just cannot get to climate change from here. And if you are at all rational, you will have recognized from the Vostok ice core data that CO2 could not have been the agent provocateur of change. You have no rational source for the massive amounts of CO2 you must have at the end of those 100k year long deep freezes to rocket out of them so abruptly. And even a caveman could see that these events are easily tied to our rickety orbit, which we will not change one iota by passing draconian laws against an innocuous, odorless, colorless gas. And no amount of GHG taxation can provide the funds that would be needed to eliminate the other planet's gravitational effects on spaceship earth.

And we have no reason at present to believe that these astronomically driven events will cease. And it will be somewhat difficult to measure anthropogenic effects against this backdrop of repetitive 400 foot changes in sea level so regular you can set your geologic clock by them.

If anything, what we have learned is that homo sapiens is a master of psychological denial on even more massive scales. Locked in to the Nine Times Rule since the Wisconsin Ice Age, we cannot decide which is the correct religion (there are so many to choose from, aren't there?), but we regularly discard the pantheon of Greek and Egyptian gods while inventing new religions, like GHG-driven climate change. But the real problem with the Nine Times Rule is that we have reached a critical juncture in the last few centuries of this interglacial period. We have dramatically overpopulated ourselves. We have the fossil record to show us that this is a self-controlling phenomenon. Overuse of resources and trashing one's environment has been the dirge of many a species. And unless we can find enough "M" class planets, and quickly, then

just as quickly this becomes a case of intellectual capacity. Do we have enough? Because even a caveman would get this.

The real question here is do you (get this)? Unfortunately, the answer is that only 11.1% of us have that potential. I am not sure that is enough.

About the Author:

Mr. McClenney is a California Licensed Professional Geologist and Registered Environmental Assessor. He was also appointed the first Certified Environmental Auditor in Victoria, Australia in 1991, empowered to sign-off on contaminated site cleanups. He has been investigating and cleaning up hazardous waste sites for 22 years.